UNITED NATIONS

ECONOMIC AND SOCIAL COUNCIL

DISTR.
LIMITED
E/ECA/PSD.3/4
28 November 1983
Original: ENGLISH

ECONOMIC COMMISSION FOR AFRICA

Third Session of the Joint Conference of African Planners, Statisticians and Demographers

Addis Ababa, Ethiopia, 5-14 March 1984

THE NEW FORMAT OF THE SURVEY OF ECONOMIC AND SOCIAL CONDITIONS IN AFRICA

1. Origin and Function of the Survey: The Survey of Economic and Social Conditions in Africa is prepared by ECA since 1958 in direct compliance with its terms of reference which require that it:

" (a) Initiate and participate in measures for facilitating concerted action for the economic development of Africa, including its social aspects, with a view to raising the level of economic activity and levels of living in Africa, and for maintaining and strengthening the economic relations of countries and territories of Africa, both among themselves and with other countries of the world;

(b) Make or sponsor such investigations and studies of economic and technological problems and developments within the territories of Africa as the Commission deems appropriate, and disseminate the results of such investigations and studies;

(c) Undertake or sponsor the collection, evaluation and dissemination of such economic, technological and statistical information as the Commission deems appropriate. 1/

It is quite evident that to promote development and co-operation among African countries, the ECA must ground itself on the continuous study of the development process in the African region, and that the results of this study must be distributed among member States.

The Survey is in this respect one of the most important document published by the ECA Secretariat, since it is the instrument through which, the development process in the African region is monitored on a regular and systematic basis, the problems encountered and the results achieved, analysed, and a basis thus established for policy formulation. In addition, the fact that planning, despite its shortcomings, has become willy-nilly, the main instrument of government action in the development field, renders its imperative to take stock at regular intervals of the course of development in order to compare objectives and achievements and take any corrective measures required. Of course, the contents of an economic survey are more or less determined by its very nature and there is not much room in fact for variations, but improvement is possible in many respects and several formats are possible from a review of past trends to the outlook form or what is called "budget économique" in the French system. In the following parts of this paper an account will be given of the development of the Survey of Economic and Social Conditions. The new format chosen since 1980/1981 will be discussed and some suggestions given as to the support expected from planning offices in the preparation of the Survey.

1/ Source: Terms of Reference and Rules of Procedure of the Economic Commission for Africa, E/CN.14/III/Rev.8.

2. Brief History of the Survey: The first Survey publication by the ECA was in 1968 and covered the period 1960-64. It was preceded by the landmark "Survey of Economic Situation of Africa since 1950" prepared in 1959 by the United Nations Department of Economic and Social Affairs and by the ECA Economic Bulletin which had been covering the African economy since ECA's inception in 1958. The 1968 Survey was followed in 1969 by the "Survey of Economic Conditions in Africa, 1968" which covered developments in the African economy during 1960-1967 and from then the Survey became a regular yearly publication. The pattern was established that the Survey published in a specific year will cover developments in the past year, since information was at best available for that period. In fact, this was not in most cases feasible because there was at least a two-years (and still is) gap in the information available. This information constraint limited the Survey to an analysis of past trends, something which was not in itself a serious limitation since policies and programmes have to start from the knowledge of the past. Moreover in the conditions existing in the late 1960s forecasting even the most basic macro-economic variables was not possible in view not only of the lack of data, but even more because of the poor quality of what was available.

Starting from 1969, in addition to the review of economic trends, a special study was prepared dealing each year with a specific development issue. In 1969 the topic chosen, was the typology of African economies, a study carried out by Prof. Pickett of Strathclyde University in Britain. The special study was intended to be of a research character and to be a contribution to the study of African development problems at a deeper level than the review of past trends.

A further innovation was introduced in 1975, the Survey covering from then on social developments as well as economic ones. Moreover, it was decided to develop the country coverage of the Survey and to publish both a regional analysis and a country by country analysis of the economic and social situation. The time coverage of the Survey was focused on the two first-years preceding publication, so that along with complete data on the penultimate year, at least provisional data and if possible forecasts were given for the year preceding the year of publication.

One drawback of the changes introduced was that if the Survey apparently became more relevant-since it was giving now country per country information - it was also very bulky and in practice very difficult to assimilate. Moreover the country reviews were perforce very limited in scope and the loss in readability of the whole document was not made up for, by the additional information given by the country reviews. For these reasons starting from the 1980-1981 Survey, it was decided to eliminate the part on country reviews (though they are still prepared by the staff) and enrich rather the regional analysis as far as possible by country information and country case studies. At the same time, a statistical annex supplying, on a country basis, the most important economic variables and social indicators was added. Also for the first time a forecast of the main macro-economic variables for the region as a whole and for the main country groupings was introduced. This latter exercise was not very successful as shown by the results published in the 1981-1982 Survey. In this latter

Survey, the forecasting method was changed to produce hopefully more realistic figures and the price base for national accounts moved to 1980 which is a better base than 1970 since it incorporates the vast changes in the price system since 1975.

The Survey is now a self-contained document organized in the following way:

1. an over-all analysis of the economic situation in the region with forecasts for the year following the year of publication;

2. an analysis of the situation and trends in the main production sectors;

3. an analysis of the foreign balance situation with foreign resources flows;

4. a study on one aspect of the social situation which will change with the year;

5. a special topic chosen in consideration to the development problems facing the region;

6. a statistical annex giving in a concise way the most important development indicators for all the member States of the Commission.

The objective is to make of the Survey an efficient tool for policy makers in African countries assisting them in identifying problems and drawing up appropriate policy measures. It is hoped that, with time, progress will be made towards the outlook format, where the emphasis is on forecasting and on the policy measures associated. This will be a slow process given the data situation and the difficulty of covering 50 independent member States.

4. Assistance Required from member States: Progress will anyway be possible only if the necessary support is obtained from member States and specifically from the planning and statistical offices. In the present situation information for the Survey is collected in the following way:

(a) through sending a questionnaire to the planning offices according to resolution 404 (XVI) and resolution 460 (XVIII) of the Conference of Ministers. The questionnaire includes statistical information and a short review of the economic situation of each country. The response to this questionnaire has been unfortunately very poor.

(b) through field missions by the staff of the Socio-economic Research and Planning Division: this is a practice started since 1975 and which envolves visits every year 25 to 30 countries. The countries are chosen in accordance with criteria like GDP, population, region, etc. in order to supply the best coverage possible. But the limited funds available make it sometimes necessary to exclude "small" countries.

(c) through country consultants: in some countries, economists working in the planning ministry or other related institutions have been hired to write surveys of their countries. This has created some problems because of the poor quality of the work in some cases and of the long delays of compilation. However the small number of country consultants which have been retained (i.e. in Ethiopia, Tunisia, Ghana, Togo and Morocco) have produced high quality work and the only reason limiting the project is lack of funds to hire more consultants.

(d) through documents sent to the Commission by countries and through other sources (other international organizations, private organizations, the economic press).

To overcome the above problems and to consistently upgrade the Survey it is imperative that:

(a) countries supply information through the questionnaire in a continuous way;

(b) that field missions sent by the Research Division be given more support in the countries by the planning offices in order to gather information and have more organized contacts and more discussions on substantive matters with the institutions concerned by economic policy.

Some countries are experiencing difficulties in filling up the questionnaire which may be too detailed. In this respect the Secretariat hopes that planning offices will send their written comments on the questionnaire. On this basis a more adapted questionnaire will be drawn up and put into use.

Formal links should be established between the Secretariat through the Socio-economic Research and Planning Division and a contact planning office official who would be responsible for relations with the Secretariat and who would then follow-up questions related to the supply of information and the organization of the work concerning the Survey.

An additional step should be to co-ordinate the Survey work carried out by each country and the Survey made at the Secretariat level. In this way not only exchange of information would take place but also Secretariat missions would have the opportunity to exchange views with the Survey team, of each country. These contacts could then go beyond the analysis of the current issues, to include policy measures envisaged by the governments.

UNITED NATIONS
ECONOMIC AND SOCIAL COUNCIL

Distr.
LIMITED

E/ECA/PSD.3/4/Add.1
27 February 1984

Original: ENGLISH

ECONOMIC COMMISSION FOR AFRICA

Third Session of the Joint Conference of African Planners, Statisticians and Demographers

Addis Ababa, Ethiopia, 5-14 March 1984

SURVEY OF ECONOMIC AND SOCIAL CONDITIONS IN AFRICA 1982-1983:

OVERALL TRENDS

A. Developments during 1982

1. There was no growth in African output in 1982. Measured in constant 1980 prices, total GDP at market prices remained at 306.6 billion dollars as in 1981. Coming after the 2.7 per cent fall recorded in 1981, the 1982 stagnation may be viewed as an improvement of the situation, but income per head fell again, and was down by 7.7 per cent compared to 1980. There was a narrowing of the deficit on the goods and services account which came down to 2.8 per cent of GDP compared to 4.1 per cent in 1981, but this reflected more the reduction of imports than an improvement of export revenues which in fact declined. The overall stagnation of output was however the result of significantly divergent trends among subregions and economic groups. First of all the countries members of OPEC, saw a further decline of their output by 2.4 per cent in 1982 after a fall of 9.6 per cent in 1981. Oil market conditions worsened during the year and the downward pressure on prices intensified as consumption declined in industrialized countries. Non-OPEC countries grew at a rate of 2.2 per cent, a sharp reduction on the 4.4 per cent achieved in 1981. In fact many countries registered, losses in output, and the overall 2.2 per cent rate was mainly due to improved climatic conditions in West and North Africa. Otherwise in Central Africa, GDP increased by .3 per cent only, and in East Africa, the growth rate of 2.5 per cent was sharply down compared to the 5.7 per cent achieved in 1981. The only countries which continued to grow at significant rates in 1982 are the non OPEC countries of Northern Africa and the non OPEC oil exporters. The Tunisian and Egyptian economies continued to grow at comparatively high rates despite the problems affecting them, and non OPEC oil exports like Congo and the Cameroon made considerable gains. In contrast, countries like Ivory Coast saw their growth falter under the impact of low external demand and high debt repayments.

2. The international situation played a key role in Africa's economic performance; through the contraction of demand for Africa's exports which resulted from the second oil shock of 1979/1980, the consequent slump in OECD's economies and the associated changes in financial flows. Demand for oil fell dramatically, as OECD oil consumption declined by 2 million barrels a day, to 33.7 million barrels a day after reaching 41.0 million barrels in 1979. African OPEC members exports stagnated at 49.3 billion dollars 20.8 per cent less than in 1980 (62.1 billion dollars). Demand for other primary commodities declined as well, prices falling for almost all African exports. The IMF commodities index fell by 12 per cent, and the UNCTAD index by 16.1 per cent, some products reaching record lows like in the case of copper. Non OPEC members exports, went down to 21.1 billion dollars against 29.9 billion in 1981. Imports declined as OPEC countries started to cut down on them through deliberate

Table III.A.1
Developing Africa's output and demand, 1980-1983
(Billions of dollars at 1980 prices)

	1980	1981	1982	1983
GDP	315.2	306.6	306.6	306.2
Imports (goods/services	97.7	100.2	93.8	94.5
Domestic demand	307.8	319.3	315.0	312.5
Investment	81.8	85.4	77.6	73.2
Savings	89.2	72.6	69.4	66.9
Exports (goods/services)	105.1	87.5	85.3	88.2
Deficit on goods and services (%)	2.3	-4.1	-2.8	-2.1
Trade (current prices)				
Exports	94.7	79.1	69.4	64.6
Imports	74.9	85.1	73.6	64.1
Balance	19.8	-6.0	-4.2	0.5
Reserves	33.7	21.9	15.7	13.9 2/
Money supply 1/	44.4	45.9	46.6	45.8
Inflation (1980 = 100)				
Average	100.0	118.9	135.0	151.3
Median	100.0	114.6	129.6	141.6

Source: ECA Secretariat.

1/ Sample of 29 countries, current prices.

2/ First quarter.

policies, and non OPEC countries either restrained them deliberately or were forced to reduce them because of falling export revenues not supplemented by sufficient capital inflows. Overall African imports went down to 73.6 billion dollars compared to 85.1 billion in 1981, a 13.5 per cent fall, and the trade deficit narrowed to 4.2 billion after a considerable 6.0 billion in 1981. However the payments problem remained serious and even worsened for a number of countries experiencing acute difficulties in financing their basic imports. Overall, Africa had to dip into its reserves in order to finance imports, overall reserves falling by 6.2 billion dollars to 15.7 billion dollars at the end of the year. Nigeria's reserves fell dramatically to 1.6 billion dollars a year and compared to 10.2 billion in 1980, and the country

started to accumulate arrears on its foreign payments. In Tanzania the level of reserve was down to 4.8 million dollars only, or 0.5 per cent of the 1982 imports at the official rate of exchange.

Table III.A.2
Developing Africa's GDP growth by subregion and groups
(Percentage at 1980 prices)

	1980	1981	1982	1983
Developing Africa	1.3	-2.7	0.0	-0.1
Oil exporters	...	-5.6	-1.0	0.3
OPEC members	-1.3	-9.6	-2.4	-0.9
Non oil exporters	...	2.6	1.8	-0.9
Non-OPEC	4.3	4.4	2.2	0.6
Least developed countries	4.4	5.0	0.8	-0.2
North Africa	1.6	-5.8	-0.6	2.4
Sub-Saharan Africa	1.1	-0.2	0.4	-1.9
West Africa	-0.4	-3.9	-0.4	-4.2
Central Africa	1.6	3.6	0.3	2.5
East Africa	4.7	5.7	2.5	0.6

Source: ECA Secretariat and country reports.

3. Agricultural production increased by 2.5 per cent, but this was mainly the result of good weather in Northern Africa and the Sahel region. A case in point was Senegal where after two bad 1980 and 1981 years, agricultural production increased by 51 per cent. Excluding the temporary effect of the weather, the situation of agriculture remained however a cause for concern, as available data tend to support the contention that on long term basis, food production per head is not keeping pace with population growth. The growth of food imports and particularly of cereal imports which went up to 24.8 million tons in 1982/1983 is an indicator of trouble. Cash crop production was also influenced by the weather particularly groundnuts, but apart from that none of the other products showed great dynamism: coffee production was at 1,043,000 tons compared to 1,000,000 tons in 1981, Ivory Coast becoming the major producer, while Ghanian and Nigerian production declined, sugar production at 7.1 million tons, and cotton at 5.2 million bales. The fall of prices on international markets badly affected export incomes and was a further disincentive to production. Internally both food and cash agriculture were suffering

in many cases from past policies which led to unremunerative producers prices compounded by exchange rates which overvalued the currencies and favoured imports over domestic production. Also agriculture had not received for a long time sufficient investment and the necessary services in terms of extension services, transport, distribution and credit were seriously deficient. Apart from this, with population growth around 2.7 per cent a year or more, the traditional slash and burn agricultural system is reaching its limits and leading to the shortening of fallow time in many areas with adverse consequence on yields.

4. In the mining sector, external factors were predominant. For oil, production was depressed in OPEC countries both by mandated production cuts aimed at maintaining prices and by falling demand. In non OPEC oil producers on the contrary, production soared, unencumbered by OPEC price levels and production quotas. For non oil mineral production the effect of the recession in the OECD was damaging, production being cut down for copper, cobalt, iron, manganese and uranium. For cobalt, Zairian production went down by virtually 50 per cent, while in Niger the falling export revenues from uranium created a serious economic crisis.

5. The manufacturing sector stagnated, showing practically no growth. The availability of imported raw materials and inputs was a key determinant of the performance of the sector, and with many countries experiencing balance of payments difficulties the inability to obtain these inputs depressed production in many countries. In some extreme cases like in Ghana, capacity utilisation fell to under 20 per cent in some factories, when other plants were closed. In Nigeria, the rate of growth of manufacturing was sharply reduced to 3.4 per cent compared to 11.2 per cent in 1981, because of the shortage of imported inputs.

6. However the problems experienced by African countries were in many cases deep seated and unrelated to the world recession. Even in the case of Nigeria, which was affected by the drop of its oil revenues, the decline of the non oil economy and especially of agriculture since 1973 which had seriously aggravated the shortfall in oil revenues, could not be attributed to the world recession. Three countries, Ghana, Zaire and Tanzania were typical in this respect of the long term problems of the region. In Ghana, the fixing of cocoa prices at unremunerative levels and the pegging of the cedi at 2.75 cedis for a dollar were instrumental in depressing cocoa production and reducing export revenues. The export sector was affected by low cedi revenues, while its domestic costs were escalating. At the same time, the government sector was steadily expanding and relied more and more on outright money creation. Credits to the government grew 7 times in the period 1971/1982. This situation grew worse and reached a crisis level during 1982, the industrial

sector being virtually paralysed by the lack of spare parts and inputs, and the supply of essentials in the cities interrupted. In Zaire, the economy has, as yet, not recovered from the post-independence period of troubles. The transportation system of the country has deteriorated so much that many areas are isolated; agricultural production had suffered considerable losses, particularly cash production, and export revenues have come to depend directly on mineral production. In the context of falling prices for copper and cobalt, an increasing external imbalance has appeared, and the country has become unable to honour its foreign debt payments. In Tanzania, agriculture has slumped both in food and cash production because in some extent of the policies pursued in the sector, while in industry, almost completely government managed, high costs, low productivity, over manning, and poor management have led to growing losses borne by the public treasury. The situation has come to a head with the shrinking of external revenues associated with the world recession, and the rising cost of energy imports. Despite a relatively considerable amount of foreign assistance, Tanzania reached the point of being unable to ensure the essential imports needed to sustain the economy.

7. Domestic demand fell in 1982 by 1.3 per cent, compared to a rise of 3.7 per cent in 1981. This development was due first of all to the fall of capital formation: capital formation declined by 9.1 per cent in volume terms after growing by 4.4 per cent in 1980. Investment declined by the largest amount in oil exporting countries, where it fell by 15.4 per cent, because of the reduction in oil revenues. In other countries, capital formation remained stagnant. In contrast to investment, government and private consumption continued to grow though at modest rates: private consumption grew by 0.4 per cent and public consumption by 0.7 per cent only. The moderation of public consumption growth was the result of a generalized clamp on budget expenditures brought about by declining public revenues and by policies designed to restore the external equilibrium and conditions of long term growth. More and more countries were applying adjustment policy packages or discussing ones with the IMF and the World Bank and the trend was beginning to be felt at the level of public expenditure. As a consequence with less recourse to money creation, money supply growth went down on average and there was some reprieve on inflation but in some countries inflation accelerated under the impact of continued deficit financing by the governments. This was particularly the case in Zaire where inflation reached 37.2 per cent, and in Tanzania with the rate of inflation growing up to 28.9 per cent.

B. The situation in 1983

8. As in 1982, African output did not show significant change : GDP fell in volume terms by 0.1 per cent, that is practically zero. The fall of income per head continued therefore and reached 10.2 per cent relative to 1980. The mechanism of the continuing crisis of the economy was more or less the same as in 1982, with the added factor of a serious drought in Southern Africa and in several parts of West Africa. In the beginning of the year, the dry season in the Gulf of Guinea area was longer and drier than usual, and later in the year the rains were short-lived or absent in the northern part of the Sahel. The situation on the oil market was characterized by continued weak demand and falling prices, so that the financial crisis endured by countries like Nigeria worsened, and the non OPEC oil exporters which had fared relatively well in 1982 had lower revenues in 1983 or maintained them only by higher export volume. There was a strong recovery in the prices and demand for primary commodities other than oil, but still insufficient to boost export revenues. As a consequence the balance of payments situation of most African countries worsened, the level of imports falling with severe consequences on the performance of key sectors, particularly industry. The fall of oil prices while it affected oil exporters, was not as beneficial as it should have been to oil importers because of the rise of the dollar.

9. The overall 0.1 per cent fall of regional output in 1983 corresponds to an almost general slowdown or fall of activity in the region. Oil exporters as a whole improved their performance only marginally with a rate of 0.3 per cent, while OPEC countries experienced a new output loss of 0.9 per cent. Non oil exporters which had grown by 1.8 per cent in 1982, registered a fall of 0.3 per cent, while for non OPEC countries there was a new deceleration of growth to only 0.6 per cent after 2.2 per cent in 1982 and 4.4 per cent in 1981. The same sharp deceleration was true for LDCs countries, and apart from North Africa and Central Africa which improved their performance, (respectively to 2.4 and 2.5 per cent) the situation worsened in all other areas, Sub-Saharan Africa as a whole suffering a fall of 1.9 per cent in output compared to stability in 1982.

10. Among oil exporters, the country most severely affected was Nigeria. Its exports declined deeply with revenues going down to half their 1980 levels, compounding the financial crisis which started in 1982. The government had to cut deeply into imports and to make drastic reductions in the investment programme in order to return to equilibrium: imports were estimated at around 7.9 billion dollars, 45 per cent less than in 1982 and less than half the 1980 level. Capital spending was revised

and most non initiated projects suspended. The reduction of imports led to acute shortages of spare parts and other inputs in industry and drastic falls of activity. The effects of the oil glut were compounded by the poor performance of agriculture, food prices rising sharply on urban markets. In contrast to Nigeria, another oil exporter, Algeria was able to weather the worst consequences of the oil glut. Though Algeria kept production at the required OPEC quota (725,000 barrels a day), it was able to avoid a fall of its exports due to its diversification into oil refining and into gas: it is estimated that exports of gas and oil condensates alone provided as much as crude oil exports. Moreover the non oil sector of the economy continued to grow rapidly (8 per cent in volume terms), and benefitted from structural reforms introduced to improve efficiency. Ivory Coast remained gripped in a crisis brought about by declining export revenues and a debt repayment requirement which reached 405 billion CFA in 1983 or more than 35.3 per cent of export revenues. The government gave priority to the repayment of the debt and enacted severe reductions in investment, credits, and generally, public expenditures. These measures brought about a slump of the industrial sector already hurt by declining demand because of less export revenues. As a result, GDP decoined for the second time in 1983 and disturbing phenomenons like sizeable lay-offs in industry appeared. The government introduced further cuts of expenditures in 1983 but finally had to start negotiations for a rescheduling of its debt service. External debt was estimated at the end of 1983 at 5.2 billion dollar, while the internal debt totalled 80 to 100 billion CFA, weighing heavily on the private sector. Like Ivory Coast, Kenya has an open economy and draws its export revenues from primary commodities, mainly coffee in this case. Like Ivory Coast again, Kenya has had an impressive growth record since independence, but its growth was interrupted by the fall of international demand for primary products and by the increase in the cost of energy imports. Petroleum imports which accounted for only 7.2 per cent of imports in 1973 went up to 36.8 per cent in 1982. From more than 7 per cent for most of the 1960s and the 1970s, growth fall to only 3.3 per cent in 1982 and remained at that figure in 1983. It would have in fact fallen further if not for the good behaviour of agriculture which has grown by more than 4 per cent and for a pickup in the tourism trade. But the balance of payments situation remained extremely difficult, external reserves falling to under 300 million dollars by October 1983 compared to 628.3 million at the end of 1982. Niger is an example of a poor agricultural country whose prospects were drastically changed by mineral exports, in this case uranium exports. After enjoying a uranium "boom" after its uranium production rose to 10 per cent of total uranium production, Niger got into trouble because of the cut backs in the nuclear programme of the United States and other industrialized countries. Export revenues started to decline, and in 1983 the budget income from uranium was estimated at only 11 billion CFA from 24.8 billion in 1980. Budget expenditures had to be cut, and above all the investment

programme of the government went down to 7 billion CFA from 23.9 billion in 1983. This had a drastic effect on the construction industry, and the country found itself saddled with a sizeable debt. Because of the good performance of the agricultural sector though, the loss in total output was limited at around 3.5 per cent at constant prices. Economic conditions were also difficult in Zimbabwe. The country started on a path of strong growth after the end of UDI and the establishment of the majority government and GDP growth averaged more than 11 per cent in volume in the years 1980-1981. However since 1982, the economy is severely affected by drought and by the fall of demand for its mineral exports, and in addition by a reduction of demand in its Southern African markets. Growth has therefore plummeted and was estimated at only around 3 per cent for 1983, while a sizeable balance of payment deficit appeared, foreign assets declined to a negative 275.4 million dollar from -58.4 million in 1982.

12. Agriculture performance was overshadowed by drought. It began at the end of 1982 in Southern Africa when the 1982/1983 session rains failed, and with an abnormal dry season in coastal Western African countries. During the year, the rains failed in some areas of Northern Sahel or were under normal levels. As a result regional food production has dropped significantly, particularly cereals whose production was down to 3 per cent under the previous level. As for cash crops they were badly affected by the drought as far as coffee and cocoa are concerned, but for these two crops price and market share were also important factors. In the event, prices were increasing throughout the year, despite a lull around August, but quota allocations under the international agreements regulating the cocoa and coffee markets were not very favourable to African producers. Ivory Coast in fact continued to operate outside the cocoa agreement and was, under the coffee agreement, forced to retain stocks equivalent to one year crop. Sugar production increased substantially (4.8 per cent) but the quotas allocated to African producers in the large American market which has taken recently up to a third of African exports were not satisfactory. For cotton, production increased, but Sudan was hit by the loss of its former markets. Apart from the temporary effect of the drought, African agriculture is suffering from the effect of past policies which with some exceptions tended to shortchange the small producers by a variety of ways, while investment was concentrated on the industrial sector. During the year, the movement toward more stimulative agricultural policies gained considerable momentum, with widespread upward revisions of producers prices and increased budget and price allocations for agriculture. This will take however some time to have visible effects in terms of increased production. Moreover as already alluded to, the problems of agriculture may be more deep seated, meaning that a fundamental change in agricultural technology away from the traditional methods used by peasants is urgent. But this again will take some time to come, and the problem is compounded by the special difficulties presented by modern agriculture in tropical areas.

13. Industry was also a problem sector during the year. Mining was deeply depressed with the continuing low demand both for oil and non oil minerals in the industrialized countries markets. The impact on the oil exporters in evident and the case of Nigeria is particularly remarkable, but other mineral producers were also badly affected. Manufacturing was beset by the lack of foreign currency to buy essential inputs, and the fall of export revenues led in most areas to a sharp reduction of investment programmes. Besides, there was the drain created by poorly designed plants in relation to markets, poor management especially in the areas of manning levels and pricing policies. But there were some cases of improved performance: in Egypt, manufacturing production grew by 10.0 per cent in the year 1982/1983, while in Zaire, after the monetary reforms introduced by the government the manufacturing sector gave signs of improved performance.

14. The oil glut continued to weigh down on oil exporting countries, and OPEC members exports registered a fall of exports to 40.5 billion dollar only. In fact after a very poor start, OPEC members exports firmed up somewhat by the end of the year. Non OPEC countries export declined also, despite the improvement in the prices of all commodities except oil. However, included in the total of non OPEC countries are Gabon, an OPEC member, and four oil exporters Egypt, Congo, Cameroon and Tunisia. Imports declined by a considerable 12.9 per cent to 64.1 billion dollar, but the main sufferers were again the OPEC countries which cut imports fiercely to reduce their balance of payments problem: Nigeria was again at the forefront, its imports falling to practically half their 1980 level. Non OPEC countries imports declined by 13 per cent. Altogether there was trade surplus of 0.5 billion dollar compared to a deficit of 4.2 billion in 1982. Despite this, Africa had to contend with a lesser volume of financial flows, and with increased debt and other payments abroad. Reserves fell sharply by 1.8 billion dollar by September an indication of an overall balance of payment deficit though of smaller dimensions than in 1982.

15. Overall there was a new drop in capital formation, estimated at 5.7 per cent in volume terms. Private Consumption continued to increase though at a modest rate (1.2 per cent) and government consumption fell an indication that the moderate budget stance taken by most government was taking hold. But savings also declined, and by a large margin (3.6 per cent). The largest reduction in capital formation occurred among non OPEC members where it dropped by 6.5 per cent, while in the OPEC group, it dropped by 5.4 per cent after the 15.4 per cent reduction observed in 1982. The reduction of the investment effort after the long rise observed during the 1970s which reached a peak in 1981 with capital formation growing to 27.8 per cent of GDP, is an extremely disquieting phenomenon as it is clear that in many areas there is a net

disinvestment, i.e. that the renewal of capital is not assured. Signs of this are clear in public utilities in a number of countries, where basic water and electricity supplies in urban areas are affected because of lack of necessary capital maintenance. In a country like Zaire, an even more serious development is the lack of capital renewal in the mining industry, a situation with ominuous long term implications. This being the case, it is also evident that in oil exporting countries in particular, the investment drive of the late 70s was not well conceived and that both the level and the structure of investment were inadequate. There were too many large projects concentrated in highly capital intensive lines of production clearly beyond the technical and management capacity of the countries concerned as well as in other cases much too large investments in infrastructure. This has happened also in Ivory Coast where the rapid increase of investment after the so called coffee boom of 1976-1978 was translated into considerable building, roads and other construction projects, types of investment which have a very long gestation periods and which are very costly when production projects are not associated with them. The end result has been the present situation where Ivory Coast is saddled with high debt repayment requirements while the investments made are not generating foreign revenues. As already remarked upon in the 1981-1982 Survey of Economic and Social Conditions in Africa, what appears decisive much more than the absolute level of investment is the structure and actual use of that investment which must be oriented where it is the more profitable and not according to criteria which do not give first consideration to economic facts.

16. The year 1983 was marked by the prominence of economic policy issues. Most countries were gripped by immediate foreign exchange and supply shortages and had to find ways to ease the constraints. As in most cases there was no relief to be expected from direct recourse to financial markets and/or to bilateral aid, and as these sources of support made anyway their intervention conditional on IMF advice and participation, the issue of adjustment under the standard IMF/World Bank prescription was conspicuous. A large number of countries entered or completed agreements with the IMF and/or the World Bank for standby credit and structural adjustment programmes which included as a general rule, measures to restrain public expenditures, readjust prices and other rates (rate of interest, rate of exchange) and decentralize the management of the economy. But even beyond these IMF/World Bank packages, there was a definite shift of government policy generally in the direction indicated by the adjustment packages. Government expenditures were curtailed, developed expenditures being the most affected as governments found it extremely difficult to reduce expenditures related to social welfare. The most resistant issue was the subsidies provided to urban consumers. In Egypt alone, these subsidies are estimated to be around 2.4 billion dollar, when the budget deficit is estimated at 6 billion dollars for 1983-1984. There has been a definite clamp down on the rise of credits to the

economy and a slow down of money creation, a natural consequence of lower government expenditures. The adjustment of the exchange rate was a particular difficult issue and raised the most objections, though a number of governments readjusted their currency to more realistic level: this was the case in Ghana where after a period of special import surcharge and export bonuses which was equivalent to a dual exchange rate system the value of the cedi was changed to 30 cedis for a dollar compared to the previous 2.75 cedis for a dollar, a devaluation of 991.1 per cent; also in Zaire in a particular bold move, the government aligned the exchange rate on the parallel market in order to eliminate a major source of instability to the economy; in other cases, namely the countries, member of the zone franc, the devaluation was achieved quasi automatically through the linkage of their currencies to the French franc. Another avenue was the control of imports: in countries where the control of the government on foreign trade was strong like Algeria, there was a direct reduction of import programmes in order to achieve external balance, while in others particularly in Nigeria the government had recourse to a variety of instruments: credit restrictions, the banning of certain lines of imports, deposit requirements etc.

17. Apart from the short term problem of external equilibrium there were basic issues which had to be addressed to. As already indicated, there was a shift of policy concerning agriculture: in a number of countries producer prices were adjusted upwards to stimulate production and the distribution of government expenditures and investment reconsidered to benefit agriculture. At the same time, measures like exchange rate adjustment and government expenditures control and restructuration are fundamental if long term growth is to be based on safe grounds: everywhere overvalued currencies discouraged farmers as they tended to benefit imports and jeopardize export production. In Ghana for example the rate of the cedi at 2.75 for a dollar led to the closure or interruption of the operations of a number of firms whose exports revenues were not sufficient to cover expenses at the established rate of exchange. Changes in the management of the public sector were also initiated in many countries and this is also a fundamental prerequisite for broadly based long term growth. Some countries are in fact hamstrung by the requirements of a money losing and overmanned public sector which is consuming resources which could be better used in other sector. Most new plans drawn by governments during the year indicate a new realism manifested in reduced growth objectives more in line with the effective possibilities of the countries, more emphasis on the agricultural sector, a more selective approach to investment and greater openess towards foreign capital and a greater room for manoeuver given to local market forces.

C. Outlook for 1984

18. The ECA secretariat has prepared its short-term projections on the economic development of Africa in 1984 on the basis of a detailed procedure involving the individual economies of each ECA member States. In some cases the plans and projections prepared by governments were available for the secretariat during the preparation of the country outlook.

19. The short-term projections were based on some general working assumptions on the evolution of the world economy and on climatic conditions. It was assumed that the moderate recovery of economic activity in the European OECD countries will continue. This implies that demand for Africa's exports will rise and consequently its mineral and agricultural production will increase.

20. It was also assumed that 1984 will be a good year as far as agriculture is concerned because of the return of normal climatic patterns in east and southern Africa and around the Gulf of Guinea. A further assumption was that demand for African oil will improve by more than 4 per cent in 1984 and that the average export price of the different kinds of light African crude oil will remain at approximately the level of $30 a barrel.

21. Finally, in the domestic front, the forecast was based on government policies implicit in budget estimates for 1984. 2/

22. On the basis of the assumptions just outlined and of the underlying trend in private consumption, the growth of GDP will be satisfactory in 1984. The ECA Secretariat forecasts that the 0.1 per cent drop in the output of its 50 member States in 1983 will be followed by 3.2 per cent growth in real GDP this year. 3/ Regrettably, prospects for the following year are not so bright, and a less dynamic pace of expansion is tentatively projected for 1985.

2/ The outlook presented in this section slightly modifies the assessment indicated in chapter I, Section B and the forecast presented here supersedes the figures given in paragraphs 26-29.

3/ In the "Survey of economic and social conditions in Africa, 1981-1982" (E/ECA/CM.9/5) a moderate growth of 2.3 per cent was projected for 1983. The outcome was less than forecasted mainly because the recovery that had been expected to take place in the second half of 1983 was delayed by unexpected weakness of import demand in the industrialized world and, above all, adverse climatic conditions in several parts of Africa.

23. Almost 85 per cent of the 1984 increase is expected to result from consumption while investment, after a decline in the last two years, will show a modest growth of 2 per cent. The level of investment, at constant prices, will be lower than was in 1982 and about 90 per cent lower than it was in 1981. As a proportion of GDP investment will fall by 3 percentage points on 1981 to 22.8 per cent at constant prices. The unsatisfactory capital accumulation during the period 1982-1984 is a matter of concern and will reduce growth in 1985 and beyond. Aggregate imports of goods and services of developing Africa are projected to increase in 1984 by about 5.2 per cent in real terms almost reaching their 1981 level. The deficit in goods and services will increase because exports will grow more slowly (4.6 per cent) than imports.

24. Agriculture will grow by 3.9 per cent followed by mining (3.6 per cent and industry (2.6 per cent). Manufacturing will grow by 2.7 per cent against the average growth of 4 per cent between 1973 and 1983. The share of agriculture to GDP (at constant prices) will be higher by almost 2 percentage points as compared to 1980 and reach 24.1 per cent, while the share of mining will fall by 7 percentage points from 24.1 per cent in 1980.

25. The overall figures for the level of economic growth conceal substantial differences between geographical subregions and the region's three economic groups (see Table III.B.1). In several countries of Central, East and Southern Africa, the combined effect of lower oil prices, moderating interest rates and stronger activity in the countries of developed market economies is projected to lead to a buoyant growth, while some countries of West Africa are facing a difficult year again.

Table III.B.1
Growth in real GDP[a/]
(Percentage change over preceding year)

	1980 share in total (percentage)	1982	1983	1984
Central Africa	8.5	-	2.5	4.9
East and southern Africa	13.7	2.5	0.6	5.3
North Africa	43.2	-0.5	2.4	3.2
West Africa	34.6	-0.4	-4.2	1.8
Developing Africa	100.0	-	-0.1	3.2
Least developed countries	13.6	1.8	-0.2	3.7
Oil-exporting Africa	65.5	-1.0	0.3	2.7
Other countries	20.9	1.8	-1.3	4.5
Developing Africa	100.0	-	-0.1	3.2

Source: ECA Secretariat.

a/ Aggregates were computed at market prices expressed in 1980 US dollar terms.

26. In Africa south of the Sahara, according to ECA secretariat estimates, real GDP will grow by more than 3 per cent in 1984 after a drop of 1.9 per cent in 1983. The main source of growth for this group of countries will be agriculture, while other productive sectors will grow moderately. Fixed capital formation will stagnate and per capita consumption improve.

27. Although there is no comparison between the projected growth of 3.2 per cent in 1984 and the stagnation in both 1982 and 1983, the 1984 growth is only slightly above the historical rate of 2.9 per cent between 1973 and 1983. This average annual growth rate means that capita income has not increased during the past decade. Africa's GDP will be the same in 1984 than it was in 1980, while per capita GDP will be more than 10 per cent lower than 4 years ago. In fact, projected per capita income will fall again in 1985.

28. On the external front, the ECA secretariat foresees a deterioration in 1984, the current account deficit widening to about 5.6 per cent of GDP. This overall figure includes an increasing deterioration in the deficit of many oil-importing countries of the region. For them, the current account positions remain under considerable strain. By contrast, the current account deficit of African members of OPEC is expected to disappear from a moderate deficit of $1.3 billion in 1983. Current account prospects for 1985 are obviously subject to considerable uncertainties. The total amount of external debt of the region is expected to reach about $158 billion in 1984, while the projected public debt service ratio is expected to fall from a peak in 1983 to 21 per cent of exports of goods and services in 1984.

29. Fiscal and inflationary pressures are expected to be contained in the framework of a gradual resumption of total demand. ECA secretariat forecasts that the 12.3 per cent increase in the consumer price index of its 50 member States in 1983 will be followed by 12 per cent inflation rate in 1984.

UNITED NATIONS

ECONOMIC AND SOCIAL COUNCIL

Distr.
LIMITED

E/ECA/PSD.3/5
15 December 1983

Original: ENGLISH

ECONOMIC COMMISSION FOR AFRICA

Third Session of the Joint Conference of African Planners, Statisticians and Demographers, Agenda item 6 (b)

Addis Ababa, 5-14 March 1984

The Role of Demographic Variables in the Formulation of Development Policies and Plans

TABLE OF CONTENTS

		Paragraph
1.	Introduction	1-16
2.	The Interrelationships between Population Variables and Development and Consideration of their Integration	17-44
3.	The Role of Population and Development Models in Planning	45-54
4.	Evaluation of the Usefulness of some of the models in Policy Formulation	55
5.	A Review of the Existing Situation on incorporation of Population Variables in the Formulation of Development Policies and Plans.	56-68

INTRODUCTION

1. In 1946 the United Nations established the Population Commission. The Commission was to arrange for studies and to advise the ECOSOC (Economic and Social Council) on the following 1/:

(i) the size and structure of population and changes therein:

(ii) the interplay of demographic factors and economic and social factors;

(iii) policies designed to influence the size and structure of population changes therein;

(iv) any other demographic questions on which either the principal or subsidiary organs of the UN or specialized agencies may seek advice.

The establishment of the Commission was due to the recognition of the importance of the role of population variables in socio-economic development. Even as early as 1946, there was no general agreement on population issues in relation to socio-economic development. Today, although the debate on population issues in development still continues, there is more awareness of the effects of population variables on socio-economic development. However, examination of development plans of African countries indicate that the integration of population variables in development planning is rather slow. In Asia too, the Third Asian and Pacific Population Conference held in Colombo in 1982 also indicated that the progress in the integration of population factors in development planning has been slow. The Expert Group on Population, Resources, Environment and Development held in Geneva 25-29 April 1983 also noted the slow progress on integrated development planning.

2. Development planning is intended to satisfy economic and social needs for the population based on available resources and population is also a resource. Since population is the focal point for development planning as population is both an agent for development as well as benefactor of development, it is therefore necessary that population should play an important role in development planning. To achieve this, concerted efforts are required to include popultion variables in the formulation and implementation of development planning. Policies to influence both development and demographic variables shoud be integral components of development planning.

3. This paper attempts to present the role of demographic variables in the formulation of development policies and plans. A historical background to population and development issues emanating from ECA meetings as well as meetings organized by other organizations

---

1/ Symonds, Richard, and Carder, Michael.
The United Nations and the Population Question.
McGraw Hill, New York, 1973, p. 44.

but related to Africa will be given first followed by the interrelationships between population variables and development and their consideration for integration. The role of demographic-economic modelling in development planning is also included. A review of existing situation on incorporating population variables in policy and plan formulation including proposals for consideration to enhance the role of population in development planning are given.

HISTORICAL BACKGROUND TO POPULATION AND DEVELOPMENT ISSUES IN AFRICA

4. The Seminar on Population Problems in Africa, held in Cairo in October-November in 1962 noted that rates of population increase might be an obstacle to economic and social progress even for those countries which are considered to be under populated 1/. The Confernnce of African Planners during its second session in 1967, recognized the important relationships between population growth and the overall economic development and it directed the attention of ECA member States to the need for evolving a population policy in their development programmes 2/. Since then, successive meetings continued to call for the need to include population variables in the formulation of development plans.

5. The regional meeting on Technical and social problems of urbanization, held in Addis Ababa in January 1969 recommended that the attention of the meeting of African Planners be drawn to the need of the African countries to adopt population policies in order to mitigate the effects of rapid rates of growth of total and urban population in most of these countries 3/. The Seminar on Application of Demographic Data and Analysis to Development Planning held in Addis Ababa in 1969 discussed the economic and social implications of demographic levels and trends. The seminar urged African countries to bring the phenomenon of urbanization into the main stream of their development plan and to pay more attention to fertility and mortality factors in development planning as these factors determined population size, growth, structure while economic development itself affects their trends 4/.

6. During the Tenth Session of the Economic Commission for Africa 1971 (The First Conference of Ministers), demographic levels and trends of the region were discussed. For the first time, a resolution on Population, Resolution 230X, was adopted; it requested the Executive Secretary as part of the Commission's work programme to carry out a study of population levels and trends in relation to economic and social development 5/.

1/ ECA Position Paper on Population, ECA-PPC/WP, No. 13, 9 June, 1971, p.1.
2/ Ibid. ECA Position paper on Population op. cit. p.2.
3/ Ibid. p.2.
4/ Ibid. p.2.
5/ Ibid. p. 5.

7. The first African Population Conference held in Accra, Ghana, 9-18 December 1971, discussed data collection, analysis and presentation of demographic data as well as its application in economic development planning. The role of population variables was considered important in relation to health, education, land use, agriculture and food supply, industrialization, labour force, resettlement, urbanization, housing, etc. Issues relating to population policy dealt mostly with spatial distribution. There was a call for further awareness among governments of the relation between population and economic growth.

8. The symposium on Population and Development held in Cairo, 4-14 June 1973, addressed itself to the impact of population variables in relation to natural resources, food and agriculture, health, education, employment and social inequality. The Symposium emphasized that the problems posed by development and population are not separate issues and that the understanding of socio-economic determinants of population trends is essential for a further comprehension of the development process. It pointed out that the consideration of the nature and consequences of demographic trends for development is a prerequisite for the formulation of appropriate measures and strategies to improve levels of living 1/.

9. The 1974 World Population Conference which many African countries attended in Bucharest, was followed by regional post conference consultations to arrive at recommendations to reflect regional needs. The African Regional Post Conference Consultation was held in Lusaka, Zambia, 16-22 April, 1975. The Lusaka meeting considered population growth in some cases to have a positive effect on development while at the same time it was recognized that rapid population growth could be an obstacle to development. Recommendations regarding family planning services in maternal and child health programmes, improvement of the status of women through education, employment in modern sector, improvement of rural life through rural development programmes, establishment of economic growth centres, etc. were made.

10. The Organization of African Unity (OAU) in collaboration with ILO organized a sub-regional seminar on "Implication of Rapid Population Growth to Socio-Economic Development with special reference to Labour and Employment Policies", held in Zambia, 23-29 November 1975. Some of the recommendations of the seminar include the following 2/:

(a) The Governments of the sub-region should make every effort in formulating clear-cut and comprehensive population policies:

(b) Countries should see to it that data collected be analysed to get its meaning in relation to planning; its subsequent analysis should therefore be seen as part of the planning process;

(c) Information on family planning be provided as a basic human right on the basis of which couples can freely decide on the number and spacing of their children.

1/ U.N. Report of the Symposium on Population and Development, held in Cairo, 4-14 June 1973, presented as Conference Background paper at the 1974 World Population Conference in Bucharest, E/CONF. 60/CBP/11, 25 March 1974

2/ OAU: Report of the sub-regional seminar on Implication of Rapid Population Growth to Socio-Economic Development with Special Reference to Labour and Employment Policies held at Livingstone, Zambia, 23-29 November, 1975.

11. The Lagos Plan of Action adopted in 1980 by the African Heads of State and Government of the Organization of African Unity calls for the establishment of appropriate machinery to ensure greater integration of population variables in development planning, bearing in mind the expected doubling of the African population between 1975 and 2000 and the impact of this on economic planning and development.

12. During the Inter-Parliamentary Conference on Population and Development in Africa, held in Nairobi, Kenya, 6-9 July, 1981, African parliamentarians discussed issues on population size, growth, structure, population policies, the relation between population and development, population movement in Africa, population education, family health etc. The importance of population variables in development planning was recognized by Conference.

13. At the 9th Conference of ECA Ministers in Addis Ababa in 1983, population issues in socio-economic development were given special consideration. There was general concern about the high rate of population growth resulting in an increasingly young population and high dependency ratio, causing social pressure in terms of unemployment and underemployment and making it increasingly difficult for States to formulate their human resources development policies rationally.

14. Recognizing the important role of demographic variables in development planning, the seminar on use of population data in development planning organized by ECA in Moscow (USSR) for African Planners, 21 August to 2 September 1983, recommended that ECA member States should strengthen the institutional framework to achieve full analysis and utilization of population data in planning. The seminar urged IDEP and the Demographic Training Centres serving Africa to encourage research on integration of population variables in development planning in their training programmes.

15. The above account is not exhausive but it illustrates the importance of population variables in the formulation of development policies and plans. Population growth is not always a complete barrier to economic development. In some cases where economic factors are sufficiently accompanied by technological advancement, socio-economic development would be achieved even in conditions of high population growth. However, such conditions do not seem to exist in most developing countries and especially in Africa.

16. Population issues are sensitive in many of the African countries. It is only recently that in only a few countries there seem to be open discussions on these issues. This may explain partly why most of the recommendations from the meetings reviewed above were of general nature. Because of the lack of openness to discuss populations issues it has not been possible for many of the recommendations to have been implemented.

THE INTERRELATIONSHIPS BETWEEN POPULATION VARIABLES AND DEVELOPMENT AND CONSIDERATION OF THEIR INTEGRATION

17. The need for integrating population variables into development planning and policy formulation arises from the fact that there is a two way relationship between population and development. Population variables affect development and development in turn influences population variables. Population variables may affect directly or indirectly various aspects of a nation's economy, e.g. economic growth, per capita income, labour force participation, employment situation, development of education, health, capital formation, rate of savings, etc. It is, therefore, apparent that policy makers and planners need to be aware of population effects on development when formulating and implementing development plans. At the same time, they should also take into account economic effects on demographic variables. The understanding of the interrelationship between population and development is essential to enhance the role of population in the formulation of development policies and plans.

18. Socio-economic development planning is a continuous process. It should start with assessment of past and current economic, social and demographic situation; then targets should be formulated. Population projections, their impact on the resource base in achieving the targets should then be analysed; policy instruments to help achieve desired targets given constraints on human and capital resources should be adopted. During the implementation phase there should be continuous evaluation and modification of policy instruments if necessary. Therefore, availability of economic, social and demographic data is crucial in policy decisions in socio-economic development planning.

19. In order to appreciate the importance and the role of population variables in the formulation of development policies and plans, the paper next looks at the following sectors - education, manpower and employment, health, food and nutrition, and housing. These sectors have been selected for illustration purposes, it does not mean that those sectors that have not been included are less important.

(i) Education Planning

20. Education statistics show that illiteracy in Africa is very high as reflected in the following examples. In 1980, the proportion of the population illiterate among those 15 years old and above were as follows in the following African countries 1/: Benin 72.1%, Burundi 73.2%, the Gambia 79.9%, Ivory Coast 65%, Mozambique 66.8%, Nigeria 66%, Somalia 93.9%. The net enrolment ratio at primary level (i.e. considering only enrolment relating to primary age groups) for both sexes for African countries shows great variation from country to country as shown below 2/. Botswana 1980, 84%, Burundi 1979, 17%; the Gambia 1980, 44%; Kenya 1978, 66%; Malawi, 1977, 40%; Mauritius 1980,84%;

1/ UNESCO; 1982, Statistical Yearbook
2/ Ibid.

Morocco 1980, 57%, Mozambique 1980, 42%; Senegal 1979, 35%; Somalia 1979, 21%; Swaziland 1979, 80%. In some countries low enrollement ratios are due to the fact that parents do not want to send their children to school. However, the data reflect that a lot of effort and resources are required to provide education to the primary school age population and planners and policy makers have a difficult task in designing education plans in view of limited resources.

21. In every African country universal education at primary level is desirable. Some countries have even policy goals to achieve this. In order to examine the feasibility of attaining this during a given period, it would be necessary to know the resource costs to be involved taking into account the numbers of teachers required, the number of pupils, number of schools, educational materials e.g. books, and equipment. Populttion size and the age of the school age popultion would be particularly important in this exercise. Various alternative projections of school age population and enrolment ratios and teachers required in relation to available resources would give guidance on choice of the targets to adopt. Consideration also need to be taken of the time it takes to train the required number of teachers.

22. The present age structure of the population in Africa has a large proportion of the young i.e. those aged less than 15 years (about 45%). This is mostly due to high fertility rates and short life expectancy. Already a large proportion of the primary school age population in some countries is not able to go to school due to inadequate schools, inadequate qualified teachers and limited financial resources to expand educational facilities and services. It therefore appears that continued high population growth rates are likely to be obstacles to government efforts to improve the quality and to expand educational facilities and services.

23. Though both demographic and non-demographic variables contribute to educational costs, it has been shown that in a number of countries the contribution of population growth to the increase in recurrrent costs of primary education over a 20-year period has been found to be of the order of 50-70 per cent; if capital costs were added the share would even be higher 1/.

24. Gavin Jones has shown that in a case where enrolment rises from 40 per cent to 95 per cent in 30 years under high fertility conditions, demographic factors alone contribute 30.9 per cent to the increase while a rise in enrolment alone contributes 26.6% 2/. A case study

---

1/ Cassen, Robert and Wolfson, Margaret, editors, Planning for Growing Population, OECD; Paris, 1978, p. 17.

2/ Jones, Gavin, Population Growth and Educational Planning in Developing Nations, Livingston Publishers, Inc. New York, 1975, p.73.

on Tanzania to achieve universal admission to first level education in 1989 from the base year 1967 showed that the total cost would increase more than 8 times during the 22 years, i.e. at a compound increase of about 10 per cent per annum 1/.

25. Governments would need to consider the reduction of high fertility and population growth rates as a means of complementing government efforts in socio-economic development aimed at increasing enrolment ratios and expanding educational services and facilities.

26. Improvement of women's education has an effect on fertility. There has been signi-$ ficant evidence from various studies which indicate that increasing education, particularly of women, has significant effect on reduction of fertility, improvements in health and nutrition. The effect of women's education on reduction of fertility works in relation with many other factors e.g. delayed marriage, employment particularly in the modern sector.

27. In formulating policies designed to reduce fertility, it should be noted that a decline in fertility will taken about 6 years to have its effect on primary education costs, and 12 years for secondary education intake. If governments would desire to reduce fertility and population growth, they would need to formulate policies on family planning programmes in relation to mother and child care programmes in health policies intended to improve the status of women in education and employment in the modern sector; health policies to reduce infant and child mortality in particular and mortality in general; and, policies aimed at improving the general life of the majority of the population in the rural areas.

(ii) Manpower and Employment Planning

28. Increase in population growth normally leads to an increased population in the labour force. Thus, employment opportunities should be created to absort the increase in the labour force. The population must have adequate opportunities to work so as to earn a living. Rapid population growth in the light of slow expansion in employment opportunities retards economic growth and frustrates government efforts in creating new jobs. It also contributes to poverty and inequality.

29. In manpower planning which deals with the supply and demand of the labour force, past and future fertility trends play an important role in the future labour-force size. It is therefore necessary when formulating policies for future labour force requirements to consider the effects of fertility.

30. Growth of employment is affected by both the size and growth of population on the one hand and the level of investment generating employment on the other hand. It should be noted, however, that investment is in turn influenced by the propensity of the population

1/ UNESCO, Ta Ngoc Chau and Francoise Caillods, "Tanzania: A Case Study" in Population Growth and Costs of Education in Development countries, Paris, 1972, p.220.

to save or to consume the income generated. In most African countries, the propensity to save is marginal and the persistent high dependency ratios seriously affect the propensity to save.

31. Manpower planning has to be undertaken in relation to the development of education. The education system should therefore be geared to train and educate the young population to be able to find gainful employment in the economy. In the case of Africa, there should be bias towards preparing the young population to work in agriculture since this is the backbone of the economy in most of the African countries. To help adaptation of technology as well as introduction of new innovations and technology to suit local conditions, particular emphasis should be given to science subjects in the education system to be able to provide the needed local personnel in high level occupations for which reliance has been till now on expatriates in some of the countries in some of the occupations e.g. doctors.

32. In the past as well as at present, most of the population in Africa flock to urban areas to seek employment or to get education since the urban centres in nearly all African urban centres are thought to have better services. The trend of rural to urban migration to seek employment continued despite the unavailability of employment opportunities. In some countries, even university graduates find it difficult to find employment in urban areas. Unemployment therefore become one of the most serious problems in urban areas. Due to wage differentials between rural areas and urban areas most people in the rural areas believe that life in the urban centres is much better even though in actual fact it is not. Thus continued migration from rural to urban areas puts considerable strain on urban infrastructure and services.

33. Population pressure on some of the towns made it extremely difficult to improve or expand services. Consequently, some governments decided to move their capital cities to new growth points in an attempt to resolve some of the population problems. These countries include Malawi, Tanzania, Nigeria and Ivory Coast. One of the effects of rural migration to urban areas is that the rural areas lose some of the able bodied people who should be producing food in the rural areas. Thus, decline in food production in some cases has been contributed to the migration of the population to urban areas.

34. Some of the issues to be taken into account in formulation of objectives and policies of the development plans should be creation of employment opportunities related to agriculture in rural areas and to reduce wage differentials between rural and urban areas. Integrated rural development programmes should be encouraged. Policies intended to influence migration away from crowded urban centres should be adopted and implemented. Reduction of population growth should also be considered in planning for employment and manpower planning. It should be noted however that the effects of reduction of fertility on the labour market will be felt 15-20 years later. Projections of manpower needs and working age population should be used in planning.

(iii) Health planning

35. As health conditions improve through better health services, mortality and morbidity would be reduced and consequently population growth would initially increase assuming that fertility remains constant or continues to increase. It should be noted also that rapid population growth creates greater demand for health services. However, in the long run improvements in health and through family planning programmes, if properly integrated in the health services, would reduce population growth. Should population growth exceed the rate at which medical and health services are able to expand, it would be expected that the health conditions of the population would deteriorate. Moreover, high fertility rate and births at short intervals contribute to high risks of maternal and child mortality, as well as to poor malnutrition problems among the mothers and children particularly in poor familiies and where food supplies are generally inadequate.

36. In formulating population policies related to family health activities in development plans it is therefore necessary to include the following goals agreed upon among the African Parliamentarians during the Parliamentary Conference on Population and Development in Africa held in Nairobi in 1981 1/.

(a) The population should be assured of a sanitary environment, including access to a safe supply of water.

(b) The population should have relevant education.

(c) The population should have access to food of sufficient quality and quantity.

(d) Medical care should be available with emphasis on pregnant and nursing mothers, children and infants.

(e) Access to fertility regulation services should be ensured.

37. To meet these goals, the Conference indicated that Governments have to evolve programmes of primary health care, as agreed at the Alma-Ata Conference in 1978 which are completely decentralized and under the administrative control of the populations to be served.

(iv) Food and Nutrition in Planning

Adequate food supplies in both quantity and quality is a basic essential for human physical development and survival. In a number of African countries food production has declined significantly in the past decade or so and population has grown much faster than food supplies. This has had a significant **deterimental** effect on the health of the population through inadequate nutritional requirements resulting into higher morbidity and mortality especially of infants, children, nursing mothers and pregnant women. Improvement in food supplies and nutritional requirements would help reduce infant and maternal

1/ Inter-Parliamentary Union: Conclusions and Recommendations of the Parliamentary Conference on Population and Development in Africa, Nairobi, 6-9 July 1981.

mortality, morbidity rates and improve the general health of the population. It is necessary that improvement in food production should be accompanied by equitable income distribution among the population as well as development of mechanisms for food distribution to reach the population who need it.

39. It should be noted that the World Population Plan of Action indicated the need to give particular consideration to all aspects of the supply of food in the formulation of national population goals 1/. Furthermore, the World Food Conference recognized the need to achieve a desirable balance between population and food supply. The conference called upon Governments and people every where to grow, and equitably distribute, sufficient food and income so that all mankind may have adequate diet while at the same time supporting national policies 2/.

40. Some African Governments are already experiencing pressure on agriculture land as a result of continued population growth. However, in other countries, there is still great potential to increase expansion of cultivable land to produce food crops. In addition to non demographic policies intended to increase food production, these should be complemented with policies wherever necessary as recognized by the President of Zambia when he said that population should be controlled in view of the limited food supply 3/. Lowering of population growth *per se* is not a sufficient factor in its own in solving the food and nutritional problems unless it is combined with economic policies, political will and strategies designed to improve the food situation. Introduction of improved agricultural methodologies, provision of higher prices to farmers, extension services to farmers, provision of credit facilities to farmers for farm inputs, improvement in transport net work, and education in the rural areas, reform in land tenure systems and expansion in agricultural land would contribute significantly to increase in food production. However, reduction of population growth renders the task of solving the food problem less difficult.

41. Governments should strive to increase food production at rates far much greater than population growth rates. In addition, African countries should concentrate on growing food products which can best be grown in Africa and to re-orient the consumption patterns of the population to locally grown food stuffs as opposed to foreign grown food stuffs. There should be educational programmes aimed at improving the nutritional requirements of the population. Policies aimed at rural development programmes in relation to agriculture

---

1/ Report of the United Nations World Population Conference, 1974, para. 14 (J).

2/ UN: Report of the World Food Conference, resolution IX, 5-16 November, 1974 held in Rome.

3/ IPPF Open File, Three Weeks Ending 30 March 1983, p. 34.

should improve the food situation. Moreover, there is need to tailor the education systems in African countries so that the young population should remain in the rural areas instead of flocking to urban centres to join the ranks of the unemployed.

(v) Housing Planning

42. Housing constitute one of the basic human needs and should therefore be given adequate attention in both rural and urban development planning. In the past planners have not paid due attention to housing planning and whatever housing were developed in urban araas did not seem to have taken into account the population needs and their ability to pay rent for such housing and consequently governments have had to subsidize significantly the rents for their employees. The development of slums in or around urban centres is a reflection of inadequate housing supply to meet population needs.

43. Population factors like population size, age, sex, rate of household formation and dissolution and migration all affect the demand for housing. Since low incomes prevent most of the population in urban areas to afford reasonable housing, the low income population resort to building their own housing which are of substandard and without adequate sanitary services. The crowdness of the population and the absence of satisfactory sanitory and other social amenities has significant deterimental effect on the well being of the population, particularly the health of the population. Continued migration to urban areas and natural increase in the urban centres in the face of low incomes, slow the increase in urban housing development. Insufficient capital for housing development and continuing price increases of materials for housing development agrevate the housing situation and accelerate the development of slums. Lusaka town is one of the many examples - it's squatter population was estimated to have increased from about 10% of the city's population in 1963 to 47% by 1973 1/.

44. Improvement in housing conditions, and improvements in adequate income distribution through creation of employment opportunities and improvements in health and nutrition requirements will have a positive effect in increasing the well being of the population. The population would be healthier, and hence be in a position to contribute more to production of goods and services in the national economy.

THE ROLE OF POPULATION AND DEVELOPMENT MODELS IN PLANNING

45. The purpose of population and development models is to take population factor into account in development planning and to indicate the impact of population on labour force, demand for jobs, education, health, housing resources, etc. Alternative models would give an indication of cost and benefit effects of different population prospects and trends

---

1/ Cassen, Robert and Wolfson, Margaret, editors, Planning for growing population, OECD; Paris 1976, P. 111.

in relation to development objectives adopted. Thus, these models, though not very precise, would guide in the formulation of appropriate population policies that would help achieve desired socio-economic development objectives.

46. To improve the linkages between population and development may require the use of population and development models. Unfortunately these models are still in their early stages of development and are not used much in decision making. Weak emperical basis for many key relationships between social, economic and demographic variables is an important factor limiting the use of population in development models..... a better understanding of the linkages between these variables could materially assist countries in improving the quality of planning and policy decisions 1/.

47. Demographic variables e.g. the age structure of the population, affect the levels of consumption, labour force, demand for education, housing, health services. Policy formulation and planning would therefore require disaggregated projections of population variables. Population in development modelling should take into account the effects of technological changes on population variables.

48. Development plans are usually for periods up to 5 years and the economic impact on demographic variables is generally not significant and consequently some planners may not consider the importance of influencing demographic variables. Since the five year development plans follow each other in succession, eventually the long-run period is entered without demographic variables being considered in the long term period of development - where population variables become very crucial.

49. Some population models for some countries outside Africa have shown that the advantage of fertility reduction amounts to a per capita income advantage of approximately 3-5 per cent after 10 years, 15-25 per cent after 20 years, and 25-50 per cent after 30 years, thus demonstrating that it is an important development variable 2/.

50. Although demographic - socio-economic models have not been sufficiently developed for application in policy formulation and decision making in development planning, they certainly have an imprtant role to play. Further research is required in these models.

51. Though this paper is not intended to dwell on population and development models, it might be useful to list some of these and make some reference where details would be found. These models include the following: BACHUE models, TEMPO models, LRPM (Long-run planning models), the Philippine ERAIEDR model, FAO model, SERES model, SIMON model and Denton-Spencer model 3/. Some of these models are briefly described below.

1/ UNFPA: Population and Development Modelling, New York, 1980, p.37

2/ OECD: Theodore K: Ruprecht and Carl Wahren, Population Programmes and Economic Social Development, Paris 1970, p.20

3/ More details on these models and further references are found in United Nations: Population and Development Modelling, Proceedings of the United Nations/UNFPA Expert Group Meeting Geneva, 24-28 September 1979, New York 1981.

52. **BACHUE MODELS:** These models are being developed by ILO and specific country models have been developed for the Philippines, Kenya, Brazil, Yugoslavia and another one has been developed as a multi-purpose model called BACHUE-international. These models try to explain the interaction between population, employment and inequality. Both demographic and economic variables are considered as endogenous and these variables are also disaggregated in the sub models.

53. TEMPO MODELS - there are TEMPO-I and TEMPO-II series which have been developed. In the first one which illustrates the benefits of reduced fertility, economic variables are influenced by demographic variables. TEMPO-II takes into account projections and there are three components in the model - demographic, economic and government that are involved in the interaction. The economic and demographic sub-models are divided into modern and subsistance sectors. The government submodel deals with expenditures, revenues and policies.

LONG-RUN PLANNING MODELS (LRPM): LRPM-1 was developed by the United States Bureau of the Census in 1971 for use in preparing quantified perspective national plans. The implications of alternative demographic and social service policy assumptions were illustrated in the model. The LRPM-II, an extension of LRPM-I, has 8 submodels which can either be run separately or as a unit. The submodels incorporate demographic projections, family planning, urbanization, labour force, education, health, housing and economic projections.

54. THE FAO MODELS - These models were developed to show the interaction between economic and demographic variables with special reference to the agricultural sector. The submodels include agriculture, population, the labour force and the economy. Each of these submodels deals with a number of disaggregated variables. From the implication and consequences of the interaction between population and socio-economic development, planners and policy makers are expected to tailor the desired strategies for development planning.

EVALUATION OF THE USEFULNESS OF SOME OF THE MODELS IN POLICY FORMULATION

55. Mr. Moreland 1/ in his evaluation of selected demographic development models concluded that it was difficult to decide on a best model since each of the models was developed based on different situations and for particular focus of interest. Moreland stressed that as any model must be selective in terms of which areas to include and which areas to exclude, none of the models can claim to be truly comprehensive and yield meaningful results. The comparative usefulness of some of the models in policy as analysed by Moreland is presented in the table below. Moreland indicated that there is a degree of subjectivity in the evaluation especially in cases where a policy area does not exist but could do so with modification.

1/ R. Scott Moreland "A review of Economic-Demographic Simulation Models with special reference to their Application to Planning and Population Policy". In Population and Development Modelling, Proceedings of UN/UNFPA Expert Group Meeting Geneva, 24-28 September 1979, United Nations, New York, 1981.

A GUIDE TO THE POLICY USEFULNESS ON SELECTED MODELS
(For key to symbols, see below)

	Policy area											
	Education	Housing	Health services	Family Planning	Manpower	Employment & Unemployment	Food & Nutrition	Poverty & income distribution	migration	Population projections & vital rates	Macro-economic variables	Prices
BACHUE Philippines	P	M	M	M	P	E	M	E	E	E	P	P
BACHUE Kenya	P	P	M	M	P	E	P	E	P	E	E	O
BACHUE Brazil	P	M	M	M	P	E	M	E	E	E	E	O
BACHUE Yugoslavia	P	E	E	M	P	E	M	E	E	E	E	M
BACHUE International	P	O	M	M	M	P	M	E	P	P	E	P
TEMPO.11	P	M	E	P	P	M	M	O	P	M	P	P
LRPM-2	E	E	E	E	P	M	P	O	M	P	P	O
Philippines SRA/IEDR	P	M	P	E	O	M	M	O	O	E	P	O
FAO	M	O	M	M	O	P	P	O	P	E	E	O
SERES	P	M	P	P	P	M	M	E	P	E	E	O
SIMON	O	O	M	M	O	M	O	O	M	M	P	O
Denton-Spencer	M	P	P	M	M	M	M	O	M	P	P	O

1. E: The policy area is modelled and could be used by policy makers as the model stands. Key variables are endogenous;
2. P: The policy area is only partially modelled and/or the model could be modified to include it with only slight modifications;
3. M: The policy area is not modelled but could be included with a moderate modification of the current model;
4. O: The model does not include the area and its inclusion would not be possible without a substantial modification of the existing model.

Source: United Nations, Population and Development Modelling. Proceedings of the United Nations/UNFPA Expert Group Meeting Geneva, 24-28 Sept., 1979, New York 1981.

A REVIEW OF THE EXISTING SITUATION ON INCORPORATION OF POPULATION VARIABLES IN THE FORMULATION OF DEVELOPMENT POLICIES AND PLANS:

56. There are many problems in integration of population variables in development planning in Africa. These problems include: (a) Inadequate understanding of the population-development interrelationship and lack of recognition of population as an important variable in development by some countries. In many cases, development problems are viewed as emanating from lack of money and not related to population growth. (b) planners may not have data on population to use, or the data may not be in the form required by the planners. The paper on African Statistical Services presented to this conference discusses the need for further improvements in data collection, analysis and their application to development planning. To this effect the ECA Conference of Ministers, at its Ninth Meeting in Addis Ababa in 1983, adopted resolution 469 (XVIII) on African Statistical Services. (c) Lack of well developed institutional framework for the integration of population variables in development planning. (d) Lack of the necessary skills among the local personnel in handling population data in planning as well as lack of well developed methodologies on the integration of population variables in development planning.

57. The UNFPA population needs assessment missions undertaken in some African countries also confirm the general problems mentioned above. The Expert Group Meeting on Population, Resources, Environment and Development held in Geneva, 25-29 April 1983, in preparation for the 1984 International Conference on Population, also highlighted similar problems.

58. The limited use of population variables in the formulation of development policies and plans is illustrated clearly in the United Nations Fund for Population activities Reports of missions on needs assessment for population assistance to many of African countries where such missions have been undertaken. Senegal, Kenya and Burundi are given as examples below.

Senegal

59. The UNFPA needs assessment mission for population assistance to Senegal had this observation: Although the Senegalese Government recognizes the pressing population problems .... the (fifth national development plan (1977-1981) does not incorporate population objectives. Of course, efforts are being made to relieve individual symptoms but there is no integrated approach relating rates and patterns of population growth to social and economic development 1/.

Kenya

60. In the 1974-78 development plan, the Government of Kenya clearly expressed concern regarding the adverse consequences for economic development arising from the high rate of population growth. However, in formulating the 1974-78 development plan, the sectoral

1/ UNFPA: Senegal, Report of mission on needs assessment for population assistance, New York, July 1978, p. 16.

ministries made only limited use of population data and made virtually no attempt to assess systematically the two-way relationships between demographic and economic factors 1/.

Burundi

61. The demographic component was not integrated in the first two five-year development plans (1968-77) and no demographic target was fixed. Population was considered only from the point of view of density within the national territory 2/. The third plan (1978-82) has not integrated demographic components to any great extent in the over-all policy for economic and social development than the first two five year plans 3/.

62. One of the actions required is to make policy makers, planners, and the population in general to understand and appreciate that population variables and socio-economic development influence each other. This can be done by organizing workshops or seminars at national and subnational levels to discuss how population variables affect government expenditure with respect to various sectors of planning e. g. education, health, housing, employment, food production, the extent to which governments are able to meet basic needs for the population e.g. provision of clean water, employment, adequate health facilities and services, education; how lower rates of population growth would affect development in general. Though it is rather difficult to evaluate the impact of seminars, workshops and case studies conducted in the past, it would appear that the projects being carried out now in some of the countries as shown in Annex I on population and development are partly as a result of the impact of these seminars. It would be urged that there is need to intensify the seminars, workshops and case studies on population and development to accelerate their impact on socio-economic development planning.

63. Another action required is to train those involved in planning how to use population data in development planning. Within the planning ministries and departments, there should be population units to be responsible for the study of socio-economic and demographic interrelationships, population policies, and the integration of population variables and policies into development plans. Some African countries have recently established such units and it is too early to evaluate their impact. Other African countries are now considering to establish these units. There should be consultation among planners, demographers and statisticians on matters of common interest. There should also be consultation between policy makers and technicians. Where it is not possible to have demographers in the planning units, guidelines should be given to planners on the integration of population factors in development planning.

1/ UNFPA: Kenya, Report of mission on needs assessment for population assistance report No. 15, New York, June 1979, p. 53, para. 158.

2/ UNFPA: Burundi, Report of mission on needs assessment for population assistance, report No. 27, New York, November 1978, p.14

3/ Ibid. p. 14.

64. Furthermore, there is need for governments to improve planning at local level and to encourage local participation. This would encourage long-term planning at local level and to take into account population variables in long-term planning. Finally governments should take appropriate measures to adopt specific policies on population issues which affect development e.g. population distribution, mortality, fertility and urbanization, and implement such policies as an integral part of socio-economic development.

CONCLUSION

65. In the long term as well as short term planning, there is need to take into account demographic variables in the formulation of development policies and plans since population variables have significant impact in the development of education, health facilities and services, provision of employment opportunities, urban development, food production etc. Development itself also affects demographic variables in many different ways.

66. Some African countries have recognized the important role of population in the formulation of development policies and plans as is evident from the data shown in Annex I. In addition, some countries like Kenya, Nigeria, Senegal and Sierra Leone have established population commissions to handle population issues as they relate to socio-economic development. Such developments in population and development in some of the African countries have taken the right direction to enable population variables to be incorporated in the formulation of development policies and plans. UN and International assistance to African countries need to be strengthened in the area of population and development, and their integration.

67. The following areas need particular emphasis in African countries to help improve the formulation of development policies and plans:

- consideration of population projection by sex and various age groups e.g. school age population, working age-population etc., and taking into account their implications.
- Improving the institutional framework for the integration of population variables into development planning; and training the personnel involved in planning how to handle population variables in planning,
- need to devise methodologies on integration of population variables in development planning,
- improvement in population and related socio-economic information for planning.

68. In discussing this paper the Joint Conference may want to suggest or recommend a course of action, if any, that should be followed to enable member States incorporate population variables and policies in the formulation and implementation of socio-development programmes.

ANNEX 1

SOME PROGRAMMES IN SOME AFRICAN COUNTRIES INTENDED TO HELP THE INTEGRATION OF POPULATION VARIABLES IN SOCIO-ECONOMIC DEVELOPMENT 1/.

(dates indicate year of original allocation of funds or when the project was executed)

Cameroon: Establishment of a Population Planning Unit in the Ministry of Planning, 1982, with ILO assistance.

Congo: Population and family life education in women's programme, with ILO support 1976.

Egypt: Population Movement and Intersectoral Labour Mobility in Comprehensive Employment Planning, with ILO support, 1979.

Guinea-Conakry: A national Seminar on Population and Development was held in Conakry in September 1980 with assistance from ECA and ILO.

Ivory Coast: A national Seminar on the Interrelationship between population growth and Development was held in December 1982 with assistance from ECA.

Kenya: Integration of population factors into rural development activities with assistance from FAO, 1978.

- Research and training on the use of population data in economic and social planning, 1978.
- Consultancy services for the establishment of National Council on Population and Development, 1982.

Lesotho: National Conference on Population Management for Development, 1979.

- A national seminar on population planning for development, August 1982.
- Incorporation of population education into rural development programmes with FAO assistance, 1981.

Mali Women and population: research, education and information programme, with assistance from UNESCO, 1979.

- A national seminar on interrelationship between population growth and development was held in 1983.

1/ UNDP: Other Funds and Programmes, UNFPA Report of the Executive Director on Allocation of Funds in 1982, doc. DP/1983/19/ADD 2, 1 March 1983; and other sources.

Mali:	Project on establishment of a population planning Unit in the Ministry of Planning, 1982, with ILO assistance.
Sao Tome & Principe:	National Seminar on the interrelationship of population growth and development, with UNFPA assistance, 1981.
Senegal:	Project on Population Communication Unit, with UNESCO assistance, 1982.
	--Establishment of a Population Unit, 1979, with UN assistance.
Sierra Leone:	Integration of population education into school curricula with UNESCO assistance, 1977. Integrated population and development planning 1978, with assistance from ILO.
Sudan:	(Juba): Population and Human Resources Development and Planning in Southern Sudan, with ILO support, 1979.
Swaziland:	Incorporating population education into rural development programmes, 1976, with assistance from FAO.
Tanzania:	Population/family life education and communication and applied research in integrated rural development (FAO) 1977.
	- National Seminar on Population and Development was held in 1980 with assistance from ECA/ILO.
	- Population Studies for Dodoma, 1981.
	- Research on the interrelationship of population and development, 1981.
Upper Volta:	Population and development planning with UN assistance, 1979.
Zambia:	Incorporating population education into rural development programmes 1979, with FAO assistance.
Zimbabwe:	A proposal has been made to establish a population unit within the development planning structure and UNFPA is expected to finance the project.

UNITED NATIONS

ECONOMIC
AND
SOCIAL COUNCIL

Distr.
LIMITED

E/ECA/PSD.3/6
9 December 1983

Original ; ENGLISH

ECONOMIC COMMISSION FOR AFRICA

Third session of the Joint Conference
of African Planners, Statisticians
and Demographers

Addis Ababa, 5-14 March 1984

African Household Survey Capability Programme progress report and selected issues

TABLE OF CONTENTS

	Paragraphs
Introduction	1-2
Review of country programmes	3-5
The Regional Component of AHSCP	6-7
Training	8-9
Studies	10
Household Survey data applications and analysis	11-21
Conclusion	22-26

Annex I

Annex II

Introduction

1. This paper attempts to summarise the progress made up-to-date in implementing the three components of the African Household Survey Capability Programme (AHSCP), namely the country projects, the regional advisory service and training (working groups, seminars and workshops). It also gives details of the document to be prepared by a consultant on uses and analysis of household survey data. Information on other relevant studies undertaken by the secretariat will also be given. Finally, the prosepcts for the future of the programme are examined.

2. Before dealing with these six issues, it is necessary to recall briefly what had been achieved by the time of the Second Session of the Joint Conference of African Planners, Statisticians and Demographers, as reported in document ST/ECA/PSD.2/6. In that document, a brief summary of the deliberations of the 1974, 1979 and 1981 working groups on Organization, Content and Methodology of Household Surveys was given. The work programme endorsed by the 1981 working group of the AHSCP for the regional staff comprised five main elements:

(a) Project proposals formulation missions;

(b) Technical advisory and review missions;

(c) Development of methodology;

(d) Training;

(e) Co-ordination of multilateral and bilateral assistance to countries.

A siminar was also convened in 1981 which dealt mainly with technical issues.

Review of country programmes

3. Annex I shows the 18 countries which have enrolled in the AHSCP which is the regional variant of the National Household Survey Capability Programme (NHSCP) and the main topics which are covered in their survey programmes. Annex II gives a country by country summary of progress made in implementing individual programmes. It should be pointed out that, with the exception of Burundi, all other countries listed have prepared project proposals which have been approved by their governments and circulated to interested donors.

4. From the account in Annex II the following countries have fully operational household survey programmes though for some of them funding for all survey rounds is not assured: Benin, Botswana, Cameroon, Ethiopia, Kenya, Lesotho, Malawi and Zimbabwe, for the rest, a number are near the stage of actual implementation. Others like Congo, Senegal and Sudan have serious financial problems and without substantial assistance cannot implement their survey programmes in the form in which these are currently formulated.

5. It seems from consultations with donors that most of them are reluctant to support the funding of local cost components of survey programmes. The argument is that these do not involve the use of foreign currencies and thus if the governments accord them the necessary priority they should be able to provide the funds out of their own resources. The donors appear to be willing to consider funding such items as equipment, vehicles and training. However, the present economic climate in the

developed countries does not augur well for the actual approval of even these elements in the budgets. The countries of the region will therefore have to evolve a new strategy for the implementation of survey programmes which does not rely too much on external assistance. This point will be considered further in the concluding part of this paper.

The Regional Component of AHSCP

6. Tables I and II show the number and types of advisory missions undertaken by the AHSCP team from the beginning of the programme up to the end of 1983. It should be noted that since this report is being prepared well before 31 December 1983, some of the missions for 1983 include those planned which may not have taken place and exclude those not planned but actually took place. The information will be updated at the meeting.

Table I

Advisory missions undertaken in connection with AHSCP

Regional Advisory missions undertaken by AHSCP Advisory team by sub-region (1978-1983)

Sub-region	1978-80	1981	1982	1983	Total
North Africa	8	3	4	1	16
West Africa	19	4	3	3	29
Central Africa	4	6	6	3	19
Eastern and Southern Africa	10	5	8	4	27
TOTAL AFRICA	41	18	21	11	91
OUTSIDE THE REGION	6	1	2	-	9
GRAND TOTAL	47	19	23	11	100

Table II

Missions undertaken by the AHSCP Regional Advisory Team by purpose and year (1978-1983)

Purpose	1978-80	1981	1982	1983	Total
Preliminary investigation	1	-	1	-	2
Project proposal formulation	10	8	5	-	23
Advisory mission	20	8	13	11	52
Assistance in preparing specific project docs.	7	2	1	-	10
Evaluation	3	-	1	-	4
Miscellaneous (Technical meetings and visits to donors, etc.)	6	1	2	-	9
GRAND TOTAL	47	19	23	11	100

7. The AHSCP regional programme had gone through a difficult period in both 1982 and 1983. By mid-1982 there was considerable uncertainty surrounding the funding of the regional component of the AHSCP in 1983 and beyond. As a result, the two household survey specialists under the UNDP funded component left the programme. Following contacts between the co-ordinator of the National Household Survey Capability Programme in New York with the Assistant Administrator-General and Regional Director for Africa of UNDP, the Statistics Division of ECA was informed that $200,000 had been earmarked for 1984 and a similar amount for each of the years 1985 and 1986 had also been tentatively set aside on the condition that ECA made satisfactory arrangements to continue the project in 1983. ECA subsequently made arrangements for the continuation of the regional component of the AHSCP in 1983. However, the financial crisis facing UNDP did not allow it even to tentatively earmark any amount for 1985 and 1986 as earlier promised. Thus the uncertainty which surrounded the project in 1982 will no doubt return in 1984 unless UNDP and/or other donors come to the assistance of the programme. In the meantime the one post of household survey specialist provided by ILO has continued as well as the usual substantive back-stopping of the project by the Chief and the Deputy Chief of the Statistics Division. It should also be noted that although the Government of the Federal Republic of Germany approved an additional post of a data processing adviser, and although a consultant was sent around selected African countries to evaluate the request for assistance, the post still remains unfilled.

Training

8. It may be recalled that during the last Joint Conference, the reports of a Working Group on Organization, Content and Methodology of Household Surveys and a Seminar on Household Surveys held in 1981 were submitted for consideration. It has been hoped that a working group would be convened in 1983 to maintain the 2 years cycle began in 1979. Unfortunately, no funding was found for the working group and it has been

tentatively postponed to 1984. Arrangements are being made for funding of the meeting but so far, there has not been any definite commitment by any donor. It is therefore too early yet to report whether a working group would be convened later this year as planned.

9. It should, however, be emphasised that these working groups provide an invaluable forum of training and briefing for the survey directors who are participating in the NHSCP in the exchange of ideas and experiences. The regular holding of such meetings therefore helps to advance progress in the implementation of the country projects. It is hoped that the temporary problems in mobilising external assistance for such meetings would be overcome. The 1984 working group is of particular importance as the survey directors would be required to review the document on Household Survey Data Applications and Analysis.

Studies

10. In spite of the absence of the two regional advisers for the best part of 1983, some research work has been done in three areas: Household income and expenditure surveys; the need for a more cost effective approach; integration of household survey programmes; and income stratification of household surveys. The reports on these studies are contained in Statistical Information Bulletin No. 16. Arrangements for a very detailed study on household survey data applications and analysis are contained in the next section. It should be mentioned however that the studies undertaken by ECA supplement those carried out by the Central Co-ordinating Unit of the NHSCP. In this connection, it should be noted that special publications on "Survey Data Processing" and Non-sampling errors" have already been issued. Other studies including The Role of the NHSCP in Providing Health Information in Developing Countries are expected to be published shortly.

Household Survey data applications and analysis

11. It has been recognised over the years by both the producers and users of household survey data that the absence of a comprehensive document on household data applications is one of the main reasons why demand for such data has not been very high in a number of African countries. True a number of UN publications have highlighted some uses of survey data in special fields but these have not embodied the concept of continuing survey programmes generating integrated demographic, social and economic data. In the absence of such guidance, data analysis has also tended to be concentrated in individual subject-fields without showing the inter-relationships between data collected during different survey rounds. Also the question of policy relevance of data analysis has received but scant attention in the region to the extent that planning has tended to be non-technical. These issues have been examined by a number of working groups and also previous sessions of the Joint Conference of African Planners, Statisticians and Demographers. In April 1983, the problem was again discussed by the ECA Conference of Ministers when examining the problems of African Statistical Services. A resolution 469 (XVIII) was passed which inter alia recommended to the United Nations and its specialised agencies that they should "extend international statistical recommendations to include guidelines on data analysis and applications".

12. As already mentioned, the analysis of survey data has been discussed extensively in the region. The various issues arising from the discussions related to the need to elaborate the various techniques for exploring data structures and also the preparation

of a document for the training of both statisticians and users on the presentation, interpretation and analysis of data. The 1981 seminar on household surveys had recommended that training workshops on survey data analysis should be organised. Before such workshops can be organized, however, the relevant background document has to be produced. It may be recalled that other papers on analysis of survey data had been presented to the 1979 and 1981 working groups on Organization, Content and Methodology of Household Surveys. It was, however, felt that these documents were incomplete for the purposes of summarising the state of the art and inadequate as guidelines for national statistical offices and statistical training centres. It was proposed therefore that a comprehensive document which would provide sufficient guidelines to statisticians on the uses and analysis of the data generated from household surveys planned to be undertaken within the framework of the African Household Survey Capability Programme should be prepared.

13. The manual or working document which is expected to be produced will not only be used for the analysis of survey data but also for the training of statisticians so that they would acquire the necessary expertise during their initial training at STPA Centres.

14. In order to produce such a document it was proposed that an approach should be made to the Government of the Federal Republic of Germany for the use of the unspent balance of the funds provided for the 1981 seminar to engage a consultant who will carry out this assignment. It is envisaged that the consultant would initially look at the data requirements already identified under the AHSCP and examine more closely the core items listed. It may be noted that the present list of subject-fields identified by ECA in consultation with the UN Statistical Office, UN specialised agencies and some African countries is as follows:

(a) Demographic characteristics

(b) Household income, consumption and expenditure

(c) Labour force (employment, unemployment and under-employment)

(d) Conditions of health, nutrition, housing, water supply, education, literacy and access to related services

(e) Food consumption

(f) Household enterprises (agriculture, handicrafts, trade, transport, etc.)

15. This classification was contained in Household Data Requirements (E/CN.14/SM/22) presented to the Working Group on Organization, Content and Methodology of Household Surveys (Addis Ababa, 15-19 October 1979). This identification of main subject-fields is for illustrative purposes only and does not necessarily indicate how countries will develop their survey programmes nor the subjects to be covered nor the priorities to be given. In addition ECA attempted to identify core items which would be covered in each survey round. These items were divided into three categories: community level, the household as a unit and for each household member and visitor. In the core items two criteria were taken into account:

(i) Items which change significantly from year to year and which therefore need constant monitoring, and

(ii) Items which will serve as explanatory or intermediate variables either for the survey in which they are collected or for the integration of results from several surveys.

16. The consultant will look in detail at the recommended tabulations in paragraph 76 of Household Data Requirements (E/CN.14/SM/22) and amend where necessary the set of tables so that it will include those which can be used in integrating the data from different survey rounds.

17. In this document, it is expected that the consultant should not devote too much time to the problem of statistical inter-linking of data from the different rounds (i.e., the use of the same sampling units at the ultimate stage) because

(i) The question has already been examined by a UN consultant, Mr. E.K. Foreman and his paper is available for use.

(ii) At this stage of the development of the survey programme in Africa, any attempt to introduce sophisticated techniques for inter-linking different sets of survey data may inhibit survey data analysis rather than promote it, This, however, does not rule out the possibility of considering other means of inter-linking data at stages prior to the ultimate stage.

18. It was also considered that analysis cannot be done in isolation. It should be related to the uses to which the survey results are likely to be put. Therefore, the consultant should cover both the uses and analysis of survey data.

19. It should be stressed that the document to be produced by the consultant will not duplicate any efforts of the United Nations Statistical Office (UNSO) with which ECA Statistics Division maintains close contacts. Analysis and applications are not generally covered in publications of the UNSO such as the Handbook of Household Surveys or in its statistical recommendations and the ECA document on survey data analysis and applications will be a first step in remedying this defect. It should also be mentioned that the document will have great value in planning national household surveys, since it will help countries to focus on the type of data with major and priority applications.

20. It was decided in determining the terms of reference of the consultant that the type of person required is not a statistician with analytical skills but a user, preferably an economist, with a knowledge of surveys and with analytical skills. Such a consultant has been identified and it is expected that by the time of the Joint Conference the document on household data applications and uses will either be completed or very near completion.

21. As stated in paragraph 8, it is intended that the draft of the document be reviewed by the Working Group on Organization, Content and Methodology of Household Surveys at its meeting in 1984 before it is published and disseminated widely.

Conclusion

22. In the previous sections and in the two annexes to this paper, an attempt has been made to review the progress achieved in the region by the various components of the AHSCP. The performance in each area has not been as high as those who developed the programme had hoped for. The main constraint seems to be funding from external

sources. It seems clear that if Africa is to achieve substantial progress in this field, it will have to rely on its own resources. In this context, African Governments are urged to provide the necessary material and human resources to enable the country programmes to be implemented successfully. Since most donors have indicated their unwillingness to provide funds for local personnel costs, African countries will be well advised to include at least that component of survey costs in their national budgets.

23. Such an approach will in certain cases lead to the modification of the survey programme as originally formulated. It is however better to implement a modified survey programme which will generate most of the basic data required for planning and other purposes than to retain an over-ambitious programme whose funding prospects are very dim. It is clear that some donors may be encouraged to assist in financing parts of the foreign-exchange components of these national projects if they are convinced that the national Government itself is according it high priority by allocating substantial resources to it. Mere affirmations of high priority not backed by any concrete action will not enlist such support.

24. For the regional component of AHSCP, UNDP should be urged to reconsider its position and to provide the US$200,000 it had originally agreed to tentatively provide for each of the years 1985 and 1986. Without a regional advisory service in this field, countries may not always be in a position to have the technical back-stopping which is so essential for the success of their programmes.

25. Donor support for the working groups and training workshops is also necessary to allow for a fruitful exchange of ideas and experiences and to introduce survey personnel to improved methodologies in the household survey field.

26. In conclusion, a concerted action by African Governments, inter-governmental organizations and donors is essential to assure the continuity of the household survey programme in a form which would support African development.

Annex I

Provisional survey topics of country programmes

	Income & expenditure	Agriculture & food production	Household Enterprises	Employment & labour force	Environment & energy	Demographic	Migration	Health	Food consumption & nutrition	Education	Housing and water	Social conditions & perspectives
NORTHAFRICA												
Egypt	X	X		X								X
Morocco	X		X	X		X			X			
Sudan	X			X		X	X					X
WESTAFRICA												
Benin	X			X	X	X	X	X		X		
Mali	X	X				X						
Senegal	X	X				X	X	X				
CENTRAL AFRICA												
Burundi	X	X		X				X				
Cameroon, United Republic of	X			X	X	X		X			X	X
Congo	X			X		X		X		X		
Rwanda	X	X	X	X		X	X	X	X		X	
EAST AND SOUTHERN AFRICA												
Botswana	X		X	X		X	X		X			X
Ethiopia	X	X	X	X		X		X	X	X	X	X
Kenya	X	X		X		X	X	X	X			X
Lesotho	X			X	X		X	X	X	X	X	
Malawi		X		X		X						X
Tanzania United Republic of	X	X	X	X		X	X	X	X	X		X
Zambia		X		X		X						X
Zimbabwe	X	X	X	X	X	X	X	X	X	X	X	X

Account of developments in country household survey programmes

1. The following is a summary of developments in countries which have enrolled in the AHSCP since the last report was submitted to the Joint Conference.

Benin

2. The household survey programme which was drawn up with the assistance of ECA, the UN Statistical Office and FAO is as follows:

National demographic survey with repeated rounds, including a "fertility" module in the first round, a "rural environment" module in the second round, and an "employment" module in the third round (1981-83)
Survey of income, expenditure and consumption (1983-84)
Employment and migration survey (1985-86)
Health and education survey (1986)

3. The multi-round demographic survey should have been completed by now. It has now been confirmed that the financial problems which had beset the implementation of the programme may now be over. The cuts in the UNFPA budget for that country enforced in 1981/82 have largely been restored.

4. The Government of Benin has also submitted an official request to France and EEC for assistance for the income and expenditure survey. Both France and EEC have approved the requests and two experts, one in income and expenditure surveys and the other in data processing, are under recruitment.

Botswana

5. The original survey programme was as follows:

- Income, consumption and expenditure incorporating nutrition (1982)
- Labour force and migration (1983-84)
- Disposal of household production (1984-85)
- Fertility, mortality and family planning, including questions on social perspectives (Demographic Survey) (1985)

6. Due to financial constraints the implementation of the survey programme as originally envisaged has been delayed. The programme has now been modified and implementation may start in 1983.

7. The revised programme is as follows:

Demographic and socio-economic indicators for the evaluation of primary health care (PHC) in Botswana (1983-84)
Income, consumption and expenditure survey (1984-85)
Labour force and migration studies (1985-86)

8. The sample for the first survey has been selected. A pretest has also been carried out.

Burundi

9. A project formulation mission visited the country in October 1982 but due to activities connected with the country's first general election and the unpreparedness of the Statistical Office to discuss basic questions in connection with the survey programme, no project proposals were formulated. Instead the CSO was asked to lay the ground work for another mission to formulate project proposals in 1983. No dates for this mission have been determined.

10. The main subjects to be covered in the survey rounds have however been tentatively determined as follows:

- annual agriculture survey
- employment and health survey
- agricultural census
- income, expenditure and consumption survey

11. A visit to Burundi to finalize project proposals will be made by UNSO/FAO/ECA as soon as the Burundi Statistics Office had indicated that it had reviewed progress up to date and determined the priorities in connection with the content of the survey programme.

Cameroon, United Republic of

12. The following is the survey programme. It should be mentioned that all dates are no longer valid in view of delays in implementing the first round of the survey.

- income, expenditure, etc. (1980-82)
- employment (1981-83)
- health and environment, demography and housing (1982-84)
- social perspectives (1983-85)

13. After the initial delays in survey preparation the income and expenditure survey was due to start in July 1983.

14. A pilot survey was undertaken in the last quarter of 1982. Preparations for the survey have since been completed. Questionnaires in French and English have been printed. Draft tables for the pilot survey have been prepared but tabulation plans for the main survey are yet to be drawn up.

15. In the meantime, preparations for the labour force survey are underway, although the Presidential Decree necessary before the survey can be undertaken has not yet been issued. As indicated in the survey programme above, the employment survey should have been carried out by the end of 1982. Due to delays in implementing the plans for the

preceding income, consumption and expenditure survey, the labour force survey has been postponed to 1984. The DSCN had intended to combine the labour force survey with a demographic survey but were discouraged from doing so in view of the plans for carrying out a population census in 1986.

16. It should be noted that funding for the first two surveys has been provided mainly by the Cameroonian Government. The Federal Republic of Germany promised to provide some equipment and vehicles. It is not known whether these have been delivered to Cameroon. The Cameroon Statistics Office was also requested by a joint ECA/UNSO mission to submit requests to UNICEF and the World Bank with respect to training and equipment. These two organizations were prepared to consider sympathetically requests submitted through the normal channels for such assistance. However, it is not known whether any requests were submitted.

Congo, People's Republic of

17. The survey programme as later revised was as follows:

- employment survey (1981-83)
- agricultural survey (1982-84)
- health and education survey (1982-84)
- post-census enumeration survey (1983-85)
- household income, expenditure and consumption survey (1984-86)
- national survey on infant mortality (1985-88)

18. Due to lack of external financial support the survey programme has not been implemented. However the Director of Statistics is planning to scale down the size and scope of the surveys to fit the type of budget which the Congo Government can provide. There is no information at this end on whether these modifications have been made.

19. The delay in implementing the survey programme has also meant that there is now a potential conflict between any survey activity and the preparations for the 1984 Population and Housing Census.

20. The secretariat understands that EEC is prepared to support the income and expenditure and other parts of the Congo household survey programme in collaboration with France provided the project is included in Congo's country programme. No information on whether this has been done is available to ECA.

Egypt, Arab Republic of

21. The following are the main elements of the household survey programme prepared by the Central Agency for Public Mobilization and Statistics (CAPMAS):

- labour force survey with additional modules on social and economic topics (1984)
- labour force survey with selected additional social and economic topics; income-expenditure survey with a farm household module (1985)

- labour force survey with additional modules on social and economic topics (1986)
- population census (November 1986)
- labour force survey; income-expenditure survey with additional modules (1987)

22. It is obvious from the above outline of the programme that the Arab Republic of Egypt intends to develop its programme of household surveys around a core survey which is the annual labour force survey. The additional socio-economic modules to be canvassed include: housing, health status, infant mortality, morbidity, use of social services, education and literacy, internal migration, domestic energy consumption and means of transportation to work.

23. The project proposals have been submitted to interested donors but the outcome of these requests is unknown at the time of the preparation of this report.

Ethiopia

24. The National Integrated Household Survey Programme (NIHSCP) for 1981-86 as approved by the Central Planning Supreme Council of Ethiopia comprises the following survey rounds:

Rural areas

- crop production and livestock survey, baseline demographic survey (September 1980 - January 1981)
- income, consumption and expenditure survey, summary labour force survey; objective crop forecast survey, crop production and livestock survey, socio-demographic survey (demography, health) (March 1981 - February 1982)
- detailed labour force survey, objective crop forecast survey, crop production and livestock survey, socio-demographic survey (physical disability), nutrition survey (May 1982 - April 1983)
- objective crop forecast survey, non-agricultural enterprise survey, crop production and livestock survey, socio-demographic survey (household amenities, access to and use of social services) (June 1983 - January 1984)
- large scale agricultural survey, objective crop forecast survey; socio-demographic survey (literacy and education) (March 1984 - December 1984)
- summary labour force survey, objective crop forecast survey, crop production and livestock survey, nutrition survey, socio-demographic survey (demography, position of women and children) (January 1985 - February 1986)

Urban areas

- income, consumption and expenditure survey, summary labour force survey, socio-demographic survey (demography, health) (July 1981 - June 1982)
- detailed labour force survey, nutrition survey, socio-demographic survey (physical disability) (August 1982 - July 1983)
- household and small scale enterprise survey, socio-demographic survey (household amenities, access to and use of social services)(September 1983 - January 1984)

- income consumption and expenditure survey, summary labour force survey, nutrition survey, socio-demographic survey (demography and position of women and children); socio-demographic survey (literacy and education) (January 1985 - February 1986)

25. In order to implement the NIHSCP quickly, the Central Statistical Office decided to accord priority to its rural component, the Rural Integrated Household Survey Capability Programme (RIHSCP). The elements of the latter programme are as shown below:

- current agricultural survey (1980-81 and 1981-82)
- crop production forecasting survey (June - July 1981)
- demographic survey (January 1981 and January 1982)
- household income, consumption and expenditure survey (May 1981 - May 1982)
- labour force survey (May 1981 - May 1982)
- price data collection (May 1981 - May 1982)
- collection of data on community level variables (June - August 1981)
- agricultural survey (1982 - 1983)
  - the health interview survey
  - the nutrition survey

26. The RIHSCP is being implemented as part of the Integrated Food and Agriculture Statistics programme with support from FAO/UNDP. UNICEF is also providing financial and technical assistance. The Ethiopian Central Statistical Office has published a methodological report on the RIHSCP covering the period 1980-83.

27. One of the main initial bottlenecks in programme implementation was data processing. This has now largely been overcome with a new computer and a number of software packages such as SPSS, COXTALLY, MULVAN, UNEDIT and XTALLY. It is expected that the outputs of the survey programme will now be published on a regular and timely basis.

Kenya

28. The details of the survey programme for Kenya are listed below:

Rural	Urban
Post enumeration survey of 1979 population census. Also literacy survey and handicapped survey (1980-81)	Post-enumeration survey of 1979 population census.
Budget (income, consumption and expenditure) and agricultural production survey (1981-82)	Budget survey, literacy survey, handicapped survey (1981-82)
Survey of health, nutrition and social indicators (1982-83)	Survey of health, nutrition and social indicators (1982-83)
Agricultural production survey and demographic survey (including fertility, mortality and migration) (1983-84)	Demographic survey (including fertility, mortality and migration) (1983-84)
Employment survey (1984-85)	Employment survey (1984-85)

29. Information available to ECA suggests that the programme is being implemented but no printed reports of the surveys already undertaken have been received at ECA. Kenya's technical assistance requirements for the programme include inter alia the following:

1 systems analyst (for 1-2 years)
Fellowships for training systems analysis and cartography
Training of middle level statistical cadres in India

30. Requests have been submitted to donors but according to information available here the United Kingdom has provided assistance to the programme in the form of motor bicycles. NORAD has also provided some assistance.

Lesotho

31. The survey programme as envisaged is as follows:

- Round 1: income, expenditure and savings (1983-84)
- Round 2: labour force and migration (1984-85)
- Round 3: literacy, health and nutrition (1985-86)
- Round 4: housing, sanitation, environment and energy (1986-87)
- Round 5: household budget and food consumption (1987-88)

32. Annual agricultural surveys will be a constant element in each round.

33. DANIDA, the Commonwealth Fund for Technical Co-operation (CFTC) and UNDP have all expressed interest in financing parts of the external assistance requirements of the survey programme. The full extent of the commitment of these bilateral donors to the survey programme was however unknown at the time of the preparation of this report. The Lesotho Statistical Office plans to go ahead with its income and expenditure survey in urban areas and preparations are being made with the assistance of ECA.

Malawi

34. The Malawi Household Survey programme consists of the following:

- Annual Survey of Agriculture (ASA)
- National Sample Survey of Agriculture (NSSA) (1982)
- Demographic survey (1982)
- Labour force survey (1983)
- Survey of the handicapped (1984)

35. The survey programme is being implemented with the financial support of the World Bank and UNDP.

36. It may be recalled that the World Bank is financing the National Rural Development Programme (NRDP III). Some elements of the survey programmes listed above constitute essential parts of the survey programme identified as relevant within the context of NRDP III. The NSAA was undertaken in 1982. ASA for 1983 has been completed and the next round is being planned. A demographic and population change survey was carried out in November 1982. Preparations for a labour force survey in November 1983 are underway with assistance from ILO/ECA.

Mali

37. The main elements in the Mali National Household Survey Capability Programme are are as follows:

- annual survey of Agriculture	May (starting 1983) - January (of following year)
- agriculture census (will replace ASA for that year)	(May 1984)
- multiround demographic survey	(1984-85)
- income, expenditure and consumption survey	(1985-86)

38. Due to the financial crisis in UNDP, the amount of money originally promised for the start of the survey programme was drastically reduced and funds were provided only for preparatory activities in 1982-83. A consultant, Mr. Karol Krotki of Statistics Canada, was appointed during this period to help the Direction National de la Statistique et de l'informatique (DNSI) with sampling and survey methodology. Preparatory work on the annual survey of agriculture has thus started. The actual implementation of the survey programme will depend on the availability of funds. Consultations with donors continue.

Morocco

39. The survey programme consists of the following rourds:

- annual labour force survey
- household income, expenditure and consumption survey, nutrition status survey (1983)
- multiround demographic survey (1983, 1984 and 1985)
- survey of handicrafts (1984)

40. The income, expenditure and consumption survey covers 12,000 households.

41. UNICEF's commitment to the funding of part of the project has been confirmed. Assistance from USAID, UNFPA and UNDP is also expected.

Rwanda

42. The original household survey programme comprises the following:

- demographic survey with a module on fertility and mortality and a module on the rural migration to Kigali and Butare (1980-81)
- household income, consumption and expenditure survey with a nutrition module (1981-82)
- agricultural survey, including livestock (1982-83)
- migration survey (1983-84)
- labour force survey with a module on use of work time in rural areas (1984-85)
- survey of the informal sector (1985-86)
- health survey (1986-87)
- population and housing census (1988-89)

43. Delays in implementing the survey programme have arisen, due to lack of the essential external support which had been assumed when the project proposals were formulated. However, the first element in the survey programme has been modified to retain only the fertility survey element and USAID is providing assistance for the conduct of the survey. The implementation of the remainder of the programme will depend on the availability of external assistance.

Senegal

44. The household survey programme comprises the following rounds:

- household income, expenditure and consumption survey in urban areas (1982)
- migration survey, agricultural census (1983)
- fertility survey (1984)
- household income, expenditure and consumption survey in rural areas (1984-85)
- mortality and morbidity survey (1985-86)

45. Due to the financial crisis facing the country and the failure to attract donors, no action has so far been taken. The Director of the BCR has undertaken to submit a modified project proposal to UNSO and ECA.

Sudan

46. The survey programme is as follows:

- demographic survey (1983-84)
- labour force and migration survey (1984-86)
- income, consumption and expenditure survey (1986-88)
- social survey (1987-88)

47. The implementation of the survey programme was delayed so that it will start after the population census. The census enumeration started in February 1983 and preliminary results are now available. The next household survey therefore can most conveniently be undertaken in 1984, although preparations for it can start in the second part of 1983.

United Republic of Tanzania

48. The different rounds of the survey programme are as listed below:

- basic agricultural and demographic survey (1983)
- large scale agricultural survey (1983-84)
- labour force, migration and annual agricultural surveys (1985)
- health, education, literacy nutrition and other social surveys and annual agricultural survey (1986)
- income, consumption and expenditure survey and annual agricultural survey (1986-87)
- household enterprise survey and annual agricultural survey (1987-88)

49. It may be noted in this context that the Central Bureau of Statistics (CBS) of Tanzania had formulated a 10-year development plan. It was considered that the NHSCP project proposal should be reformulated on a more realistic basis and co-ordinated with the long-term work plan prepared by the CBS. It may also be recalled that a SIDA project formulation mission prepared a report in June 1982. This report also needs to be taken into account in revising the project proposal. The UN Statistical Office, FAO and ECA are ready to assist the Government of Tanzania in reformulating the project proposal.

Zambia

50. The proposed household survey programme consists of the following:

- integrated agricultural survey (1983-84)
- integrated agricultural survey and labour force survey with modules on social variables and conditions (1984-85)
- integrated agricultural survey and multiround demographic survey with modules on social statistics (1985-86)
- integrated agricultural survey and multiround demographic survey with modules on social statistics (1986-87)
- integrated agricultural survey and income, consumption and expenditure survey (1987-88)

51. A project document was formulated in the last quarter of 1982. It has been submitted to interested donors. It is too early to expect donors' reaction. The post of household survey adviser previously included under the UNDP-financed project for the statistical office has been deleted. An FAO Adviser on Agricultural Statistics is already in position and he is expected to look after the work of household surveys also. It is expected that preparations for the Annual Agricultural Surveys to be launched later in 1983 are well underway.

Zimbabwe

52. The household survey programme comprises the following:

- pilot demographic and agricultural survey, demographic survey (PES as a second phase sample) and survey on household economic activities (1982-83)
- Annual agricultural and demographic survey (AAD survey) (1983-84)

- income, consumption and expenditure survey (with a module on energy consumption (1983-84)
- AAD survey, labour force, time budget and migration survey (1984-85)
- AAD survey, survey on household enterprises (1985-86)
- AAD survey, survey on selected social indicators such as housing, housing conditions, education, sanitation and water (1986-87)
- AAD survey, survey on selected social indicators such as transport and communications, health, nutrition, community development and women's participation (1987-88)

53. A project document was formulated in 1982. A household survey specialist has been appointed since 1982 from UNDP funds. Pilot surveys to test the sample design for household surveys were carried out from February to June 1983 with financial assistance provided by UNICEF. Several questionnaires, e.g., household economic activities, demographic and socio-economic data, community level variables, income, consumption and expenditure, agriculture and livestock, energy, etc. have also been prepared. A seminar was held in Harare from 11 to 14 July, 1983 to review the results and experience of the pilot surveys and to discuss related matters for implementing the household survey programme. Financial assistance for the seminar was provided by SIDA.

54. Negotiations for external financial support for implementing the survey programme are in progress with several donors. In the meantime, preparations are underway for launching the agricultural survey in September 1983.

UNITED NATIONS

ECONOMIC
AND
SOCIAL COUNCIL

Dist.: LIMITED
E/ECA/TJP.3/7
27 October 1983

Original: ENGLISH

ECONOMIC COMMISSION FOR AFRICA

Third session of the Joint Conference of
African Planners, Statisticians and
Demographers

Addis Ababa, 5-14 March 1984

PADIS - its past achievements and future directions

THE ROLE OF A DOCUMENTATION AND INFORMATION SYSTEM IN AFRICA's DEVELOPMENT: PADIS - ITS PAST ACHIEVEMENTS AND FUTURE DIRECTIONS

1. A documentation and information system is no more than a collection of recorded communications of human knowledge as contained in books, learned journals, government publications, etc. and which have been processed and organized for the use and scientists, humanists, scholars, professional men, policy makers, government officials, etc. In short, it can be described as more or less a traditional library whose value has been enhanced and transformed by means of the computer. The computer has made it possible for data relating to these recorded communications to be made available almost instantly by pushing a button. Computer technology and space technology have helped in no small measure to make universally available to those who wish the whole stock of human knowledge, without which scientific and technological innovation is hardly possible. There is a definite correlation between availability of knowledge (information) and scientific and technological development. For it is by building on the achievements of the predecessors which are transmitted through books and articles in learned journals (communications) that present day research workers and inventors make current breakthroughs. In short, the developed countries of the world have reached their present socio economic pedestal through the dissemination of information in different fields of endeavour. Countries that aspire economic and technological development can only re ch a similar level by having information not only about their own physical and natural circumstances but also about the activities and processes through which the developed world has passed.

2. The fact of the relative underdevelopment of the African continent hardly needs serious elaboration. After all, it has the largest concentration of the least developed countries of the world. Constraints on their development would seem to include lack of technical know how and skills to exploit the physical and natural resources with which many of them are endowed; ignorance as to the location and extent of these resources; inadequate or non-existent managerial skills and a host of others. Put differently, developing African countries lack appropriate manpower that possesses the knowledge (information) and skills to identify or discover their natural endowment and to exploit them. An attempt will be made to elaborate on these inadequacies and shortcomings by looking at a few different sectors like agriculture, geology, industry, scientific research and social welfare in order to see how availability of information and documentation can help to correct them.

3. Agriculture is the bedrock of the economy of most African countries. As a result, many of them have concentrated on the production of cash crops in order to earn foreign exchange. In the colonial days, the metropolitan powers spared no effort to undertake both laboratory and field research which ensure increased and continuous production. They studied the climatic, pedological and other conditions under which cocoa, coffee, tea, groundnuts, palm products and others

.../

would grow and thrive. As a matter of fact, the independent countries of Africa have largely depended on the scientific information accumulated during the colonial era for the survival of their cash crop economy. What new information there has been since independence, has been gathered in agricultural research stations in African countries. Unfortunately, such information is not as widely disseminated as during the days of the colonial powers. African countries do not seem to have effective means of collecting their agricultural data on a systematic basis let alone of sharing them among neighbouring countries whose problems and conditions are similar. If there is a well developed data base on agricultural economy, duplication of research effort will be avoided. Time and effort would be concentrated on other important areas. Furthermore, all will gain by sharing such information.

4. In recent times, concern has been expressed in the highest quarters about the increasing inability of African countries to feed themselves. There are a number of reasons for the unsatisfactory situation including the migration of erstwhile farm labour from the rural to urban areas. But by far the most devastating has been the failure of crops due to climatic factors and changes as well as the destructive activities of pests. No doubt, agricultural scientists in African countries are investigating these problems. Their various laboratories are making useful findings. Unfortunately, some of these findings which do not get published in learned journals perhaps because of the nature of their findings or targetaudience get lost in official reports and files. African scientists do not seem to have the means of pooling their knowledge. Research workers who work in similar fields ought to be able to share their findings and avoid needless duplication of efforts. By that means it will be possible to build on previous work. The most effective means of sharing scientific information nowadays in by the creation of data files. The Food and Agricultural Organization (FAO) has provided a good lead in this direction by creating a data file in the field of agriculture which is known as AGRIS.

5. Technological know how is a very important ingredient in the process of industrial development in any country. But supply of raw materials, minerals and other natural resources is no less important. The ex colonial powers firmly maintained their stranglehold on their colonies in order to ensure free and continuous flow of these raw materials to their factories. If African countries must produce industrial goods locally it is essential for them to ensure a supply of raw materials. It is a notorious fact that most African countries do not have an accurate record, if at all, of the variety and quantity of minerals and natural products available within their boundaries. Therefore, the first step necessary in the process of industrialization is to compile an inventory of these resources so that appropriate decisions as to which goods can profitably be produced locally can be taken. Such information will be stored in a data base and retrieved at will. Some laudable steps are already being taken towards the creation of common markets in various regions of the continent. When such economic unions have started to operate effectively information relating to the

.../

availability of mineral and other resources will enable the various governments to work out areas of co-operation with regard to industrial development. It will be evident from the foregoing that the provision of information regarding the location, quantity and extent of mineral resources will assist the planning and establishment of industries in developing African countries.

6. The government and other authorities of African countries are well aware that they cannot achieve industrial development merely because they have full and detailed information about their natural and physical endowments. They still have to depend for capital and expertise on either the governments of developed and industrial countries or on multinational corporations who very often are not guided in their operations by altruistic reasons. National interests and profit motivation weigh most heavily in nearly all the activities of foreign countries and corporations. They, therefore, drive as hard a bargain as possible with the developing countries. The less informed or more inexperienced the official representatives of the poor countries are, the more stringent the conditions imposed. It will therefore, be helpful if developing African countries establish a network of industrial information.

7. When new industries have been established, governmental authorities have a duty and responsibility to establish quality control and standardization in order to protect the interests of consumers. It does not matter whether the industries in question are products of indigenous technologies or services. Laws, ordinances and guidelines are, therefore, produced for the regulation of industries. Here again, it will be very profitable and helpful if African countries can share information and documentation in the field of industrial regulation among themselves.

8. It is not enough from the point of view of economic development to have knowledge of the location and quantity of minerals, raw materials and the like. It is of vital importance to investigate their peculiar properties for the purpose of effective utilization. For instance, it was known that coal existed in the mines of Udi in Nigeria but it was only after appropriate scientific tests had been made that it came to light that it was not suitable for the proposed steel industry. Knowledge derived through such research activities when collected and dissiminated in a systematic and organized manner among African scientists who may be working in related fields can be very useful for scientific development. Furthermore, it is important and in the interest of their work for African scientists to keep abreast of new methods and discoveries being made in the laboratories of industrial countries of the world. Facilities for relevant and useful information abound in data bases which have been created in Europe and America. African scientists, by gaining access to such new knowledge which can be adapted to local needs can make useful contributions to the development of their countries.

.../

9. So far, we have paid attention to the importance of documentation and information to the work of the agricultural scientist, natural scientist and the ind ustrialists to name a few, all of whose activities can lead to socio-economic development. But most developing countries have discovered that development does not necessarily occur spontanously. It has to be induced through the method of planning. Many African countries do, therefore, formulate development plans that span specific periods of time e.g. five year, three year development plans. Clearly, very little meaningful planning can be done in the absence of data and information relating to the different sectors including agriculture, industry, trade and social welfare programmes. A few illustrations will bring to light the importance of data to the work of the planner. In the field of education, for instance, unless adequate statistical information is available regarding the composition of the population such as the number of children of school going age or the geographical distribution of the population, it will be difficult to determine the number and type of educational institutions to establish where and when. Similar data are of crucial importance for the creation of health facilities, old age pension schemes etc. Hardly any social welfare facility can be provided without the provision of appropriate data. In addition to scientific data already mentioned, agricultural planning can be effectively done in the face of facts relating to the nature, extent, and history of private land holding. Before governments can embark on development projects of any scale they need information about the financial resources that are available to them in the form of revenue from customs duties, taxes, exports etc. The documentation and storage of such data are very crucial to development planning. From the foregoing it is evident that the development planners, no less than the policy makers and administrators need a lot of data and information before they can make decisions that can lead to the overall development of their country.

10. Since development of a country at the present stage of human affairs is not likely to occur spontaneously, a lot of planning on the part of government has got to be done. Needless to say, the various categories of experts that participate in development planning need data and information in order to pursue their tasks meaningfully. These data and information are contrained in reports, surveys, research findings, population, trade and other statistics, inventories of resources etc. It is the function of a documentation and information system to collect, organize, retrieve and disseminate all the above mentioned material containing data. The role of a documentation and information system, therefore, is to make readily available to those who need it information that will help the plan meaningfull for development.

.../

11. The following are excerpts from the various chapters of the Lagos Plan of Action which throw some light on the expected contributions and role of information and documentation activities in the process of social and economic development:

12. "Member States are convinced of the fundamental role of intra African industrial co-operation in all its various forms as an instrument for self reliance and acceleration of industrial development to achieve the 2 per cent Lima target for Africa, taking into account, in particular, the discouraging attitude of developed countries, and the present low progress in the intra African Co-operation. Member States have therefore, decided to give concrete expression to their will to co-operate by adopting the following measures:"

> "exchange of information among Member States on technical and financial specifications and costs related to contracts on implementation of industrial projects with developed countries as a means of reducing excess costs in foreign exchange resulting from the weaknesses in negotiation capacity of developing countries due to lack of information among them relating to these contracts;

NATURAL RESOURCES

13. "The major problems confronting Africa in the field of natural resources development include: the lack of information on natural resources endowment of large and unexplored areas and the activities of transnational corporations dealing with natural resources assessments; the lack of adequate capacity (capital, skills and technology) for the development of these resources; a considerable dependence on foreign transnational corporations for the development of a narrow range of African natural resources selected by these corporations to supply raw materials needs of the developed countries; the inadequate share in the value added generated by the exploitation of natural resources of Member States due to imperfect pricing and marketing practices; non integration of the raw materials exporting industries into the national economies of the Member States thus impeding backward and forward linkages; extremely low level of development and utilization of those natural resources of no interest to foreign transnational corporations; and disappointingly low general contribution of natural resources endowment to socio economic development. Because of these factors Member States are unable to exercise meaningful and permanent sovereignty over their natural resources".

14. "During the 1980s the strategy for the developing countries of Africa in their natural resources development should aim at:

.../

undertaking the assessment of their natural resources endowments and the use of the information on natural resources distribution and availability for national and African multinational socio economic development projects intended to produce goods and services to meet the needs of Member States.

"In recognition of the significance of natural resources in providing a sound base for national socio economic development, Member States should take early steps to acquire a thorough knowledge of their natural resources endowments. These include the establishment of manpower development and institutions building programmes for the conduct of field studies and preparation of inventories of natural resources."

In particular measures should be taken by each Member State to ensure that all results and basic data, especially maps, files, logs and all other information acquired by foreign transnational companies during their mineral prospection activities in the country are handed over to the Government."

"To ensure the best possible storage and utilization of these data, a documentation centre (data bank should be established at national level."

MINERAL RESOURCES

15. The main development objectives of the strategy for mineral resources development during the 80s would be:"

"Development of a system of transfer of know how, and exchange of scientific, technical and economic data in geology, mining activities and mineral economics among Member States as well as with countries from other developing regions."

16. "The objectives outlined above should be achieved through the following activities".

"A joint regional programme for the preservation and proper use of geological documentation, reports and maps and mineral collections."

.../

HUMAN RESOURCES DEVELOPMENT AND UTILIZATION

17. "The required action at those levels would be necessity be directed to reinforcing national action through providing guidelines for, and facilitating action in, manpower development and utilization. The programme strategy therefore, emphasizes co-operation and collective self reliance in manpower resources through:"

> "support for an information and placement service facilitating the identification and employment of African experts and consultancy organizations such as in being operated by the ECA programme for promoting the use of African experts and the development of indigenous consultancy services;"

18. "Support for the OAU/ECA Co-ordinated and administered Expanded Training and Fellowship Programme for Africa which aims at training 3000 Africans in five years with priority to the manpower requirements of the various priority sectors and product lines already mentioned; to the development of the teaching and research staff of regional and subregional institutions, to experience transfer, and to evolving an African TCDC in utilizing available training facilities within the region. This programme needs a minimum operational budget of US $1.5 million a year as well as training places. Support by African States are required through:"

> "providing regular information on national training and scholarship facilities available for training nationals of other African countries."

SCIENCE AND TECHNOLOGY

19. "Lack of information is one of the most serious obstacles to the selection, acquisition and use of appropriate technology options. An understanding of the local environment and the character and orientation of the transferees is as important as information on the technology to be supplied. Care should therefore be taken to ensure that the technology supplied matches the local needs identified. Machinery should be established to assess and promote the acquisition and disemination of information on the range of alternative technologies, processes and products available for particular applications. The following measures are proposed.

.../

20. "Establishment or strengthening of a national centre for technology information dealing with:

> "Importation of technology; Identification of subsidiaires of foreign firms in the region and elsewhere; compilation of information on the operation of transnational corporations and regular dissemination of such information to the business sectors of the economy; compilation of data on foreign investments imports, raw materials, prices of products on the international market standards and related matters, etc.
>
> "Data and statistics on local technological capabilities and infrastructure; Data on local capability to obtain, adapt or generate required technology; information on the relationship between demand for goods and services and efforts to supply adequate technology (and the related problems of understanding the character and orientation of transferees); information on centres capable of providing technical advice and information, on existing engineering consulting firms; standards institutions, etc.,
>
> "The provision of the above services to various sectors of the economy, but especially to the production system."

"The organization jointly by African and Third World governments of programmes to provide fellowships and/or scholarships to enable "science and technology" students to study and visit centres of technology development in countries such as China, Japan, India, the Republic of Korea, etc., to gain experience and collect information on the history of technology development in these countries. Such programmes should be planned by inter disciplinary teams of experts drawn from Third World and participating African countries as African national training programmes - involving universities, research and development institutions, industry, management and business institutions;

"Encouragement of the establishment and/or strengthening of local scientific and technological associations and societies. National technology information centre should establish or strengthen ties with other regional technology information systems and technology information centres of Third World countries to facilitate the flow, and exchange of information in all fields relevant to socio-economic development.

"With the assistance of ECA, regional institutions and other Third World country institutions, pilot studies on agricultural and industrial extension services so as to establish an improved framework for feed back from them to the research and development and productive centres;

.../

"Actively supporting and strengthening African Regional organizations in the field of patent documentation and information, such as ESARIPO and ESAPADIC, CAPI and PADIS."

HEALTH AND SANITATION

21. "Such machinery will also be responsible, inter alia, for the performance of the following activities:"

> "Co ordinating the collection, analysis, assessment, cataloguing and dissemination of relevant health information from indigenous and foreign sources,"

TRADE AND FINANCE

> "To reduce the cost of trade promotion activities, Member States should endeavour to establish, through sub regional associations of trade promotion centres and through the Association of African Trade Promotion Organizations, joint facilities for conducting market surveys, disseminating information on trade and training experts in foreign trade promotion."
>
> "Trade data banks should be established at the sub regional and regional levels."

PADIS:- Its Achievements so far and Future Directions

22. The political leaders of the African continent have all along expressed their commitment to the social and economic development of the region through national and collective self reliance. They have also demonstrated an awareness of the important role which a documentation and information system can play in the process of development. As a result, the UNECA Conference of Ministers and Heads of States of African countries passed a number of resolutions urging the Executive Secretary of UNECA to establish numerical and non numerical information systems and services.

23. In response to these resolutions and after the necessary preliminary preparations had been made, the Pan African Documentation and Information System (PADIS) was inaugurated under the auspices of UNECA on 30 January 1981. Its objectives are as follows:-

.../

(a) to identify, collect, process and store documents particularly of African provenance that contain information that relate to the social and economic development of Africa;

(b) to facilitate the exchange, sharing and utilization of such information by establishing appropriate organizational machinery and using modern technology.

24. In order to realise these objectives a decentralized structure of organization has been adopted. It consists of:

(i) National centres to be established by each member state of UNECA;

(ii) Sub regional Centres (five, to be set up in each sub region of the continent;

(iii) Institutional participating centres to be based in regional and sub regional institutions;

(iv) The Central Co-ordinating Office to be based at ECA headquarters in Addis Ababa.

PADIS plans to pursue the following areas of activity:--

(1) Bibliographic Reference Services which consists of the following files:-

(i) PADIS-DEV

25. This is the development information reference file and is being built in co-operation with certain international and African regional organizations including UNDIESA (United Nations Department of International Economic and Social Affairs), African Development Bank and the Economic Community of West African States.

(ii) PADIS-COM

26. It is hoped that this file will contain technical and scientific bibliographic reference to documents of relevance to the African continent and is to result from collaborative effort with international co-operative information systems, regional organizations and National Information and Documentation Centres. Contributions are expected from, to name a few, FAO/AGRIS, ILO/ILIS, IFIS, IAEA/INIS, Pan African Institute for Development, African Regional Centre for Science and Technology, African Network for Administrative Information (ANAI).

.../

(2) Descriptive Inventory Service

27. Arising from the Buenos Aires Plan of Action for Promoting and Implementing Technical Co-operation among Development Countries, PADIS plans, under the auspices of UNDP to keep:

(a) a register of African experts and specialists in all fields of human endeavour;

(b) a register of on going research and development projects, including their various stages of implementation;

(c) a file of research and training institutions.

Numerical Data Bank Services

(8) Numerical Data Bank Services

28. These are envisaged to cover the collection, formatting and dissemination of numeri cal data on Africa. They are to consist of the following components:

(i) PADIS-STAT:-- This file is to be implemented in collaboration with the Statistical Offices of African Countries and the UNECA Division of Statistics. It will consist of chronological statistical data on Africa.

(ii) PADIS-TEND:- This is the Pan African technical, numerical non Statistical data bank on national resources, industrial facilities, industrial products and commodities.

4. System's Interconnection Support Services

29. Exchange and information sharing are greatly facilitated by means of quick and direct communication channels, not only between national centres, sub regional centres and the Central Co-ordinating Office, but also between African countries and data bases in Europe and America. Towards this end PADIS/NET, i.e. a PADIS telecommunication data transmission network will be established so as to interconnect all the PADIS data bases at all levels. It is hoped that satellite communication and ground stations will be used.

5. Data Processing Support Services

30. The main component of this activity is PADIS ADMIN which is an integrated system for administrative information including software packages for personnel, finance, stock keeping, medical records, project management systems, etc.

.../

ACHIEVEMENT OF PADIS SO FAR

31. Staffing:- PADIS began operations with a complement of thirty staff members of nine professionals, fifteen semi professionals and six secretarial and clerical staff, It consists of the Computerized Documentation Section, the Computer Operations Section and the Maintenance Reprography and Printing Section.

Computer (Hardware and Software) and other equipment

32. An HP 3000/III computer having a configuration of 2 megabyte core memory and 644 megabyte peripheral memory (3 disc dirves and 2 tape drives as well as 2 line printers and 67 terminals) was installed. For software, MINISIS which is a package for storage and retrieval textual data was adopted with an eye on ensuring compatibility with other systems. In anticipation of PADIS plan to process and analys statistical and other forms of data the following softwares were acquired: SPSS Statistical Package for the Social Sciences; ISEA on line software for econometric analysis; IPACA an on line package for planning and budget control; TDP text and document processor; and ASK a data base interrogating and reporting software.

Training of Personnel

33. The Central Co-ordinating Office trained personnel in the Computerized Documentation Section and the Computer Operations Section for periods ranging between 6 and 12 months on various aspects of the work of the project.

34. Short training courses were also organized for ECA staff members in the following Divisions:- Statistics, Population, and Social Research and Planning.

35. A four week training programme was organized for English speaking African countries to enable them use a new software designed mainly to handle censuses and survey data.

36. Two workshops on documentation and microfiching techniques were organized in collaboration respectively with the Government of Zimbabwe (4 to 8 August 1981) and the African Development Bank (19 to 26 July 1981).

37. A total number of thirteen trainees from eight African countries (Botswana, Congo, Gabon, Guinea, Ivory Coast, Liberia, Rwanda, Senegal) have undergone training programmes of varying duration in documentation work and information systems management at the PADIS Central Co-ordination Office in Addis Ababa, Ethiopia.

.../

PADIS-DEV and DEVINDEX

38. By the end of 1981 some 2,000 records had been analysed and processed to from the uncleus of the PADIS DEV component. Five issues of DEVINDEX AFRICA an index to documents on the social and economic development of Africa had been published. Issues of the publication have been widely circulated. Furthermore, the Development Information System of the United Nations Department of International Economic and Social Affairs provided the Central Co-ordination Office with its data base amounting to 3,500 bibliographic of relevance to African development.

PADIS COM

39. In pursuance of the plan to create a number of complementary files (PADIS COM), negotiations were made with ILO and FAO for cooperation in the creation of sectoral information for which they were responsible and with regard to Africa. As a result, ILO made available to PADIS 15,000 bibliographic records which are germane to African development. By that means, the first PADIS complementary file ILIS/AFRICA was created. Futhremore, FAO and ILO were to provide staff to maintain ILIS/AFRICA and AGRIS/AFRICA. The following sectoral files being created: The African Regional Centre for Science and Technology Information System (ARCTIS); Information System on African Legislations, Treaties, Agreements etc. (LAW AFRICA); Trade and Finance Information System (TF AFRICA); African Information System on Population Activities (POPIN AFRICA); and the African Documentation System on Environment and Human Settlements (HABITAT AFRICA).

PADIS STAT and PADIS TEND

40. The French Government, under the auspices of ECA undertook a survey on the nature, structure and availability of statistical data in Africa. According to their recommendations, PADIS/STAT will be established at the following three levels:

1. Level I - Country profiles
2. Level II - Bulk of statistical information
3. Level III - Time series statistical data

Level I provides a comprehensive country prfile of one to two pages of statistical data on any one country. It makes use of the statistical data obtained from Levels II and III.

Level II contains the bulk of statistical data available at ECA at very low levels of aggregation.

Level III contains selected time series data.

.../

41. In order to progress with the limited resources available the work on Level III data base has been given top priority and is now in progress. The level III data base will meet most of the requirements of ECA for statistical data for analysis and projections. It will soon make it-possible to automate the various ECA statistical publications, like the African Statistical Year-book.

42. A representative of PADIS attended a workshop which was organized under the auspices of the Commission on Storage, Processing and Retrieval of Geological Data and the Eastern and Southern African Mineral Resources Development Centre. The outcome of the seminar was that the latter organization would see to the definition and accumulation of geological data while PADIS would undertake the computerized processing of the data.

PADIS NET

43. The European Space Research Institute of the European Space Agency assisted ECA by making a pre feasibility study of a pan African satellite communication network with linkages for teletransmission of bibliographic and numerical data. Currently the French Government has sponsored a mission to have another look at the same proposal with a view to rendering assistance.

44. In addition a senior PADIS staff member had participated in a workshop in the design of the data transmission networks sponsored by ESRIN and held in Toulouse, France.

National and Sub-Regional Centres

45. The national centres to be established in ECA member states constitute the hub around which PADIS will operate. Each national centre will collect, process and disseminate information related not only to the socio economic development of its country, but also to sectors like education, agriculture etc. It will be their responsibility to provide such information on request to other African countries. The Central Co-ordination Office, therefore submitted proposals for the creation of these centres to each member state. Unfortunately, the national centres are not being created as fast as has been envisaged. Algeria, Egypt, Morocco, Guinea, Congo and Tunisia have designated their national centres as PADIS participating centres.

46. It is assumed that the slow progress in the creation of national centres is the reluctance of governments to commit the required resources in accordance with the proposals submitted by PADIS. This reluctance stems from the low priority governments tend to attach to the establishment of information systems vis a vis other pressing priorities. Consequently, PADIS has to design an

.../

approach that minimizes the financial burden for African countries, i.e. the establishment of five sub regional documentation and information systems that will be capable to cater to the needs of the countries that are to be served by them. These sub regional centres will be properly equipped and manned.

47. As a preliminary step in this direction, PADIS submitted proposal at the last series of MULPOC meetings. The results of the meetings were extremely satisfactory since four of the five regions endorsed the proposal while the fifth (North African MULPOC) requested the commisioning of a feasibility study.

Descriptive Inventory Service

48. As has been observed earlier, PADIS maintains a Descriptive Inventory S[illegible] under the auspices of UNDP. Accordingly, a Directory of African Experts has been compiled. The first volume is with the printers. The first and second supplements are being prepared.

Future Directions

49. The main pre occupation of PADIS, in the next few years, will be to redouble and concentrate effort in getting national centres created in the member states, and create sub regional centres:- NADIS, WADIS, CADIS, ESADIS. However, since African countries have attained varying degrees of development in the field of information and documentation, it may be desirable to devote attention to those countries that appear immediately ready during a given period of time. Towards this end, PADIS has decided to concentrate on seeing to the creation of one national centres in each sub region every year. Having identified the countries, PADIS will give advisory and technical advice as well as financial assistance, if needed, towards with the procurement of equipment, especially computer hardware and software. It will also provide training facilities and fellowships as a means of strengthening the personnel that may be working there.

50. Computer facilities, technical assistance and training facilities will be made available at sub regional centres. When PADIS/NET has reached the stage of implementation, it is hoped that the national and sub regional centres as well as the Central Co-ordinations Office in Addis Ababa will be interconnected by telecommunication channels by means of satellite and ground stations. By similar means, access will be gained to data bases outside Africa particularly in Europe and America.

.../

51. PADIS hopes, in the coming year, to devise the Scientific and Technical Information for Development (STISD). It will be a set of data bases and banks accessible and distributed by teleprocessing throughout Africa by the PADIS network.

52. The TCDC programme of descriptive inventories, will continue. Yearly supplements of the Directory of Experts will be produced. As soon as necessary arrangements have been concluded, the following directories will be produced:

(a) Directory of Institutions

(b) Inventory of Development and Research Projects.

53. PADIS, it can be safely concluded, is working towards fulfilling the objectives for which it was established, thanks to the financial support of donor agencies. But its ultimate success will depend on the earnestness with which African countries take the information and documentation project. That seriousness of purpose will be reflected not only by the establishment of national centres in each country but also by the provision of the necessary infrastructure like libraries, national telecommunication network, postal services, telephone telex etc. which facilitate documentation and information activities.